From the St. Louis Post-Dispatch, Sept. 17, 1963]

Missing From MAPP

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The 10-State power pool project of Midcontinent Area Power Planners (MAPP) is
described in Union Electric News, publication
of one of its major participants, as "the
very thing the Post-Dispatch advocated 2
vears 400 in utility investor-owned years ago in urging investor-owned com-panies to join Government in an overall grid plan." The Post-Dispatch continues to advocate all-inclusive pooling of power, em-bracing not only agencies of the Federal Government but also municipal and rural electric cooperative and privately owned pro-duction and distribution systems, as first proposed on a nationwide basis by Secretary of the Interior Udall.

It is on this very account, that MAPP is not an overall grid plan, but to the contrary highly and one-sidedly exclusive, that we express serious misgivings. MAPP could indeed produce precisely the adverse effect, by setting up a rival pool, dominated by private companies, in advance, and preventing an overall grid from being accomplished, by

keeping its members separate.
Union Electric's publication offers no facts to support its claim that MAPP is "an overall grid plan." Yet how can a pool be factually so described when it does not include the largest transmission system in the 10-State area, that of the U.S. Bureau of Reclamation, when it does not include more than a smattering of the rural electric cooperatives, and none at all in four of the States; when it does not include a single one of the many municipal systems or the numerous public utility districts in Nebraska or elsewhere with the lone exception of the Omaha Public Power District; and when it does not even include most of the private power companies, among them several of the largest?

MAPP's public announcements make much of its professed intentions to take in other of its professed intentions to take in other members—but strictly on its own terms. These terms express "strong opposition to Federal domination of power supply or transmission," and a qualified desire to "coordinate with Federal agencies," leaving the uncritical reader to infer that in MAPP primary. vate companies are joining the Government

in an overall grid plan.

But are they? MAPP's own statements do not say so. And Senator Mercalf of Montana says the Bureau of Reclamation "proposed a power pool to these people" before MAPP was conceived but has never received a reply to its offer.

Does this, in the opinion of the Union Electric Co., substantiate the claim that it and its associates in MAPP are joining the Government in an overall pool? Or does it suggest that the old technique of spite lines to forestall public power is being magnified manyfold into a multistate system of spite pooling to forestall a national gfid? Clarification of these questions would be ease itself. It would require only a clear and simple statement that the members of MAPP propose to join in pooling with all Federal, municipal, and cooperative agencies on equal terms. Do we hear such a statement?

TRIBUTE TO SENATOR ANDERSON

Mr. METCALF. Mr. President, last May I had the privilege to be one of some three dozen Members of the Senate to attend a testimonial dinner sponsored by a dozen national conservation organizations which honored our distinguished colleague, the senior Senator from New Mexico [Mr. Anderson], and also Mrs. Anderson.

On June 13 of this year I introduced into the Record, starting on page 10161, several excerpts from remarks made by

speakers at this dinner, and several editorials and articles which followed the event and which appeared in several national magazines.

I now wish to add to the testimony of the greatness of this distinguished colleague, an editorial by Carl W. Buchheister, president of the National Audubon Society which appears in the September-October issue of the Audubon magazine. I believe this editorial comes close to expressing in words what most of us feel in our hearts for this great leader, statesman, politician, and con-servationist—this true American who is leading the fight to save our wilderness and natural resources from the encroachment of selfish man and his destructive machines.

Mr. President, I ask unanimous consent that this editorial entitled "The Pleasure and Honor Were Ours" be printed in the Congressional Record.

There being no objection, the editorial was ordered to be printed in the RECORD. as follows:

THE PLEASURE AND HONOR WERE OURS

All agreed it was one of the most noteworthy occasions for conservations in the history of the Nation's Capital when some 600 persons turned out for the testimonial dinner to Senator CLINTON P. ANDERSON, of

New Mexico, last May 20.

Among the diners were about 50 Members of Congress, three members of the Cabinet, representatives of President Kennedy's White House staff, and a virtual outpouring of admiring citizens. The dinner was sponsored by 12 national conservation organizations, the National Audubon Society among them. The purpose was to pay deserved tribute to the great Senator who is one of the finest examples of the kind of statesmen we like to think of as making up the Congress of the United States, a man of exceptional ability and extraordinary devotion to the public welfare.

Our purpose was to accord recognition to Senator ANDERSON, particularly for his leadership in behalf of needed laws and sound programs for the conservation of America's natural resources. The overwhelming Senate passage of the wilderness bill, of which he is the leading sponsor, is one measure of his effectiveness.

In truth, it is we all of us who call ourselves conservationists-who are honored by the dedication and the career of a man like

CLINTON ANDERSON.

And, like Theodore Roosevelt, who first made conservation a national purpose and a public cause, and later great ones we could name, Senator Anderson illustrates the truth that for the purpose of winning the battles we engage in, there is no substitute for having able advocates in high places, as at the head of a key committee of Congress, at the helm of an executive department, or in the White House itself. The Yankees win the most pennants because they have the best pitchers and the hardest hitters.

TRIBUTE TO SENATOR PASTORE

Mr. WILLIAMS of New Jersey. Mr. President, it is my very great pleasure to bring to the attention of the Senate an article which recently appeared in the Newark, N.J., Sunday Star-Ledger about one of our most distinguished colleagues, Mr. PASTORE, of Rhode Island.

We here are well aware of the qualities of diligence and ability which Senator PASTORE has been bringing to his duties in the Senate for nearly 13 years. While he is not always in the limelight or in

the headlines, he is always to be found in the thick of the fight for substantive, progressive legislation.

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This excellent article, commenting on his role as a truly effective legislator, is richly deserved, and Mr. President, I request unanimous permission that the text of the article be inserted in the Record at this point.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

[From the Newark (N.J.) Star-Ledger, Sept. 15, 19631

A LITTLE MAN MAKES GOOD IN A BIG WAY

(Senator Pastore is a living symbol of an amigrant father's dream. The son of a immigrant father's dream. The son of a tailor, the Senator from Rhode Island is cutting a big path for himself on Capitol Hill these days, riding herd on President Kennedy's priority legislation: Ratification of the nuclear test ban bill, the private accommodations phase of the civil rights bill, and the vital rail strike legislation. Senator Pas-TORE is a little man who is not afraid to tangle with some of the big figures in the Senate. He came out of a tangle with the late Senator Bob Kerr of Oklahoma, a big, bluff man who made an imposing, formidable opponent in a debate. Senator RICHARD RUSSELL, an astute Member of the upper House, has openly admired the little Senator from the Nation's smallest State. He once said that he wanted Pastore as his lawyer if he ever got into trouble. This is not faint praise.)

(By John A. Goldsmith)

JOHN ORLANDO PASTORE is the Senate's smallest Senator from the Nation's smallest State. His story reads like the American dream.

Modern mythology alleges the Senate is run by men of towering seniority, generally from the South. Twenty-seven Senators have more seniority than the immigrant tailor's son who is the senior Senator from Rhode Island

In recent weeks, however, Democrat Pas-TORE has been riding herd on three of President Kennedy's priority bills. No one else has had quite the same role in handling rail strike legislation, the nuclear test ban treaty, and the public accommodations civil rights bill.

True, it was something of an accidentillness of Commerce Committee Chairman WARREN G. MAGNUSON, Democrat, of Washington-that gave PASTORE a central role in consideration of the measures. But such accidents have been the making of many a congressional leader.

In Pastore's case, presiding at daytime civil rights hearings and night rail hearings was public notification of the fact that he had arrived as a Senate leader. Actually, as chairman of the Senate-House Atomic Energy Committee and a member of the Senate Democratic policy committee, he already had moved into a leadership position in Senate councils.

In a broader sense, of course, he also had attained a position of political leadership when he was elected to the Senate in 1950, having served as Lieutenant Governor and then as Governor of his State.

Born in Providence in 1907, Pastore ran errands for his fathers' tailor shop until the father died. Young Pastors was then 8 years old. His mother went back to work as a seamstress to support the boy and his three brothers and two sisters.

PASTORE worked after school at a jewelry factory and graduated in 1925 from Classical High School. College was out of the question, although Brown University was conveniently close. Instead, PASTORE clerked for an electric power company and enrolled in night classes at the local branch of Northeastern University. He won a bachelor of laws degree in 1931 and was admitted to law practice in

Starting in Providence's seventh ward, he moved into politics. In 1935 he was elected to the State's general assembly. In 1937 he became an assistant State attorney general. He became Lieutenant Governor in 1944, then was Governor from 1945 until 1950.

During his tenure as Governer, the State adopted a fair employment practices law, and Pasrore pushed through an aid program for teachers' salaries and a sales tax needed to finance it. The sales tax often a Governary of the sales tax often a Governary control of the sales tax of

to finance it. The sales tax, often a Gover-nor's return trip ticket to private life, did not curb Pastore's increasing margins at the

It was something of a triumph, too, albeit one of another kind, when shortly after his election to the Senate he was made a member of the corporation—a trustee of Brown University.

PASTORE'S Senate voting record places him with Democratic liberals on such issues as social welfare and civil rights. He has, however, split with the liberal group on such issues as the communications satellite bill for which, as chairman of the Senate Com-munications Subcommittee, he was floor manager.

manager.

In one of the Senate's most bitter personality disputes of recent years, he voted for the nomination of his friend, Lewis L. Strauss, to be Secretary of Commerce and against his Atomic Ehergy Committee coleague, Senator CLINTON P. ANDERSON, Democrat, of New Mexico, who was leading the fight against Strauss. He did not believe, with ANDERSON, that strauss had been evasive and misleading in his dealings with the committee. committee.

PASTORE has a broad and ready smile, and his bearing shows a bit of cockiness. From his small frame, however, there emanates a strong piercing voice which is lifted not infrequently in Senate debate.

PASTORE was, in fact, one of the few Senators to tangle periodically in floor debate with the late Senator Robert S. Kerr, Democrat, of Oklahoma, and emerge with arguments unblunted and spirit unchastened. Senator RICHARD B. FUSSELL, Democrat, of Georgia, one of the Senate's top orators and legal experts, has on occasion said he would like to have PASTORE at his lawyer if he were in trouble.

In the best tradition, however, neither the talented tongue nor the cocky bearing have any dampening effect on Pastore's sunny disposition in which Pastore is not always a matter of great ser ousness to Pastore.

Recently he was discussing the effects of

nuclear fallout with newsmen. He did not, he made it quite cleir, go along with the idea that changes or mutations caused by fallout might prove peneficial rather than harmful.

"Mutations," he said explosively, "perhaps they'll make Pastore 6 feet tall."

THE JEWISH HOLIDAYS

Mr. KEATING. Mr. President, it is with a warm sense of personal pleasure that I extend my heartfelt greetings and good wishes to our Jewish citizens on the occasion of the Jewish New Year.

The ancient holiday of Rosh Hashanah and the Ten Days of Repentance culminating in Yom Kippur, the Day of Atonement, embody the solemnity with which the Jewish people hold the coming of a new year of responsibility. The sound of the shofar echoes as an affirmation of the joy of life but at the same time its strangely sad call reminds man that the coming year requires a serious reexamination of purpose. As we examine our past, praying for the understanding that will enable us to profit from our errors, we open the way to a richer and fuller existence.

The message of the Jewish New Year is a universal one which all men should heed. These are historic times, rife with social and political unrest both at home and abroad. In a time of confusion, and at times seeming chaos, the melancholy wail of the shofar soes out to provide a promise of order and hope to all citizens of the world.

It is my fervent hope that the coming year will mark the sunrise of a new and even richer era of spiritual vitality and growth in the age-did and distinguished history of a great people. America is a tapestry woven of many strands, and none is more golden than that represented by our fellow Americans of Jewish descent. From the earliest days of our history this Nation has counted among its richest nourishing forces the spirit-ual strength, the intellectual dynamism, and the dedicated energy of its Jewish sons and daughter:

As one who has been privileged to visit the fountainhead of Hebrew culture, as one who has witnessed with his own eyes the tremendous forward surge of history that Israel represents in the Middle East, I can understand whence came these high qualities of heart and mind and will that have been translated—here in America—nto the national fiber and the material advancement of our beloved country.

Israel stands as a tribute to the in-domitable spirit of the Jewish people just as the new year embraces an op-timistic hope for the future side by side with a strong sense of the importance of looking back into history for future guidance. Particularly in the present moment of history, when new nations are emerging into the light of freedom, does the example of what Israel has accomplished stand as a living proof of the will and ability of a people to create its own destiny.

In keeping with the spirit of the occa-sion, then, I am privileged to echo the ancient words utlered in a solemn yet

"May you be inscribed, once again, in the Book of Life for a good New Year."

The PRESIDING OFFICER (Mr. Hart in the chair). Is there further morning business. If not, morning business agressized. ness is concluded.

THE NUCLEAR TEST BAN TREATY

The Senate resumed the consideration of Executive M-88th Congress, 1st session-the treaty banning nuclear weapon tests in the atmosphere, in outer space, and underwater.

The PRESIDING OFFICER. Senate is now in executive session. question is on agreeing to the resolution of ratification of the treaty.

Mr. BYRD of West Virginia obtained the floor.

Mr. MANSFIELD. Mr. President, will the Senator from West Virginia yield?
Mr. BYRD of West Virginia. I yield

to the majority leader. Mr. MANSFIELD. I suggest the ab-

sence of a quorum.

The PRESIDING OFFICER. clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without

objection, it is so ordered.

Mr. BYRD of West Virginia. President, the time is now at hand for a final decision on the treaty banning nuclear weapons tests in the atmosphere, under water, and in outer space. On August 8, 1963, President Kennedy transmitted this treaty to the Senate, with the recommendation that we advise and consent to its ratification. He gave as his principal reason that, in his opinion, the treaty would advance world peace and inhibit the nuclear arms race. Since that time, the Senate Armed Services Committee, of which I am a member, the Senate Foreign Relations Committee, and the Senate members of the Joint Committee on Atomic Energy-along with other Senators—have been engaged in an intensive study of the merits of the treaty.

Knowing that the final responsibility for approving or rejecting the treaty lies in our hands, I have literally searched my soul for the correct decision. When our decision has finally been reached, whatever that decision may be-and of course there is no question that it will be that of approval-no American can be sure that it is the right decision. None of us can be sure, beyond doubt, that either ratification or rejection will ultimately be in the best interests of our country. Some persons have stated that, while it would be a mistake to reject the treaty, it may prove to be an even greater mistake to ratify it. So only history will be able to record the correctness or the incorrectness, the wisdom or the lack of wisdom, the success or the failure, of the action we take.

There is no question as to the objective we seek. All of us share the desire to advance the cause of peace and to strengthen the progress of peace. All of us would like to reduce the threat of nuclear war. All of us would like to see a complete termination of all nuclear tests in all environments, if both the East and West could agree upon a system of adequate and effective inspection, and if at the beginning of such cessation of testing the United States were, indeed, superior in nuclear weapons technology in all of the yield-weight ranges. All of us would like to live in a world in which weapons of war and destruction could be converted into instruments of peace and human progress. All of us would like to move away from the costly expenditures for armaments, and move in the direction of applying our financial and human resources toward the building of a better world for mankind. All of us would like to eliminate the tensions that for many years have plagued the free world. The question is, however, whether the proposed partial test ban moves us closer toward these goals, or leads us in the opposite direction.

The proponents of the treaty admit that it carries inherent military risks;

but, in their view, these risks are out- the security of this Nation demands that weighed by political and other advantages which are expected to accrue from the treaty's ratification. Those of us who oppose the treaty recognize that certain benefits may result therefrom, but feel that the risks involved are too great to assume in a situation which, at best, offers no positive guarantee that hoped-for benefit will really materialize.

"Hope springs eternal in the human breast," and the proponents of the treaty base their position largely upon a hope that it will lead to a lessening of tensions, to a slowing of the nuclear weapons race, and to eventual peace. We opponents of the treaty, feeling that past hopes having proved to be false, are unwilling, in what is our view, to risk the security of this Nation in pursuing what may be another false and even more

dangerous hope.

When the treaty was first announced, I was inclined to support it. The longing for peace which I share with other Americans naturally led me to see, in this proposal, a faint glimmer of hope. I thought it best, however, to withhold my judgment until I could have the opportunity to listen to the testimony and to weigh the evidence presented both for and against the treaty. If it were not for my membership on the Senate Committee on Armed Services, in all likelihood I would have supported the treaty, because otherwise I would not normally be exposed to the subject matter of the treaty as thoroughly as I have been as a member of that committee. Although the treaty is within the jurisdiction of the Foreign Relations Committee, in view of the military aspects the Armed Services Committee has participated in joint hearings with the Foreign Relations Committee. Moreover, the Senate Preparedness Investigating Subcommittee of the Armed Services Committee has held executive hearings independent of those joint hearings in which the parent committee participated. Although I am not a member of the Senate Preparedness Investigating Subcommittee, I did attend and participate, as did other members of the full committee, in the hearings of that subcommittee at the invitation of its chairman, the Senator from Mississippi, Mr. STENNIS. In addition to participating in the public and closed hearings, I have read and reread most of the testimony submitted in those hearings. I, therefore, feel that I can say, without being immodest, that there are few Members of the Senate that have been exposed to more of the evidence presented at the hearings than have I.

After weighing the arguments for and against the treaty, I have reached the conclusion that a greater risk to our country lies in accepting this treaty than in rejecting it. I have no doubt, as I have already indicated, that it will be ratified by the Senate, and I realize that the position I am taking will not be shared by a great many of my colleagues in this body. But, while it would be easy and pleasant for me to say "yes" to this treaty, it is my conviction that

I say "no." In so doing, I recognize that those Senators who will vote to ratify the treaty have the same sincerity of purpose and the same dedication to their country as I have.

ARGUMENTS IN FAVOR OF THE TREATY

The following arguments are the principal ones, in my opinion, that have been advanced in favor of ratification:

First. The test ban treaty is desirable because further nuclear testing in the atmosphere is not necessary, the Soviet Union and the United States each having already acquired a capacity of overkill.

Second. The test ban will eliminate the danger of further fallout.

Third. The test ban will serve to deepen the rift between Russia and Red China.

Fourth. The test ban will contribute to a lessening of tensions and be a step toward other agreements and eventual peace.

Fifth. The test ban treaty will slow, or signal the end of, the arms race.

Sixth. The test ban will make it more difficult for Russia to catch up with the United-States in the field of nuclear ex-

Seventh. The test ban will slow down the proliferation of nuclear weapons.

Mr. President, I should like to analyze each of these arguments in brief detail. 1. THE TEST BAN TREATY IS DESIRABLE BECAUSE FURTHER NUCLEAR TESTING IN THE ATMOS-PHERE IS NOT NECESSARY, THE SOVIET UNION AND THE UNITED STATES EACH HAVING AL-READY ACQUIRED A CAPACITY OF OVERKILL

As to the argument by some that the United States has acquired an overkill capacity, Secretary of Defense McNamara, who supports the treaty, made the following comment, which appears beginning on page 146 of the hearings before the Committee on Foreign Rela-

Secretary McNamara. I don't believe that we have execessive armaments today. I don't believe we have excessive strategic forces, which I believe were those portions of our armaments that Senator McGovern was speaking about. As I tried to outline in my statement this morning, there are a number of uncertainties which we must recognize in evaluating the relative positions of the U.S.S.R. and the United States.

It is not possible for us to eliminate those uncertainties from the equation. And be-cause our knowledge is not complete and because it cannot be made complete in the near future, we must seek to offset those un-certainties with additional forces. This we certainties with additional forces. This we have done. We have made every effort to hold the defense budget, which is presently being considered by Congress, at an absolute minimum. I think we have done so. I would not recommend that one dollar be taken out of it.

In responding to further questions regarding overkill, Secretary McNamara had this to say:

I think it is possible to say that we have more weapons than would be utilized in a particular war situation, without concluding that our inventories are excessive. For example, were there to be a war at sea, and the war were limited to sea, presumably the weapons that had been designed for land warfare would not be utilized. Conversely, if there were a general nuclaer war, it is possible that certain weapons, conventional

or otherwise, that had been designed for less than a general nuclear war would be in excess supply. But in neither instance would it mean that our inventories were necessarily excessive. I do not believe they are excessive today. I think it is necessary to continue to increase them as we are planning to do in fiscal 1964.

Secretary McNamara had this additionally to say:

One other major point raised was that we have more nuclear weapons than we could conceivably use in an allout war * * *. We must meet requirements for various kinds of limited and tactical nuclear contingencies; the great bulk of the nuclear weapons we "could not conceivably use" during an allout war are low-yield weapons procured to meet requirements for tactical nuclear

And, therefore, I am convinced that the kind of large cut in the strategic budget proposed by Senator McGovern's speech could not be adopted without substantial risk to our national security.

Gen. Thomas S. Power, Commander in Chief, Strategic Air Command, in his appearance before the Senate Preparedness Investigating Subcommittee was asked about overkill and he answered in this way:

I do not agree with it. I think the overkill claim is often made by people who are not well informed and do not necessarily know

what they are talking about.

Now, there is such a thing as a programed bomb or weapon as against the delivered weapon. If you look at the programed weapons, that is, if you look at the weapons I have in the present war plan, you would say we are overkilling. But if you look at the weapons that I think will survive and arrive, then you will change your opinion.

So a lot of these people look at our stock-pile and they think that every bomb is going to be delivered. Now, do they think that every bullet that is bought for a rifle is going to kill an enemy soldier? No. We buy millions upon millions of bullets. I don't know the exact statistics, but maybe one in a hundred thousand bullets actually will kill an enemy. It is the same way with a shell or a cannon.

Not every bomb is going to arrive at the target. Many of them will be destroyed on the ground before they are launched. Many will be destroyed by enemy action. Some will be duds. But we have figured this all out mathematically for every sortie and every weapon, and we have arrived at

a confidence factor.

You can have any confidence you want, but if you want to be, say, 90 percent sure that you will destroy a very sensitive target, and if you have a 50-percent confidence factor that a particular weapon will reach its target. then you will have to program somewhere in the neighborhood of six to seven weapons to hope to get one there, but there is still a 10-percent chance that none will get there, So it is a question of mathematics and how sure you want to be or how much you want to gamble.

We write a war plan so that, if we are told to go to war, these prime sensitive targets will be destroyed, and I have a high confidence factor. I have a 90-percent confidence factor because I have programed many weap-ons and I have crosstargeted them, using different types of weapons from different areas to get a reliability factor that is acceptable.

Now if they all got there, yes, we would be overbombing and overkilling. But again people forget that what we are really trying

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to do is to prevent war. We are trying to make this thing so sure that it will deter anyone. I think this is the real challenge, to try to prevent it. I think we can. We have done it and I think we can continue to do it if we make up our minds to do it.

Senator Jackson then interposed that: The critics make the fatal mistake of equating the number of weapons and their combined yield with delivery on the target.

General Power's final comment on this point was as follows:

I know many of these people, and it is really easy to become an expert in a field that you have had no experience in and no responsibility for. You have to have overwhelming superiority, if you are really trying to deter. That is the key to it.

(At this point Mr. NELSON took the

chair as presiding officer.)
Mr. BYRD of West Virginia. Mr. President, it is evident from the statements of Secretary McNamara, a supporter of the treaty, and General Power, an opponent of the treaty, that the argument which is being made by well-meaning people throughout the country that we have two or three times as many weapons as we need, so why not put a stop to their production, is a fallacious argument. This philosophy, of course, discounts the fact that it would be foolish for us to attempt to disarm unilaterally or even to halt, unilaterally, the production of weapons. It also discounts the possibility of progressive development of techniques and weap-onry. General Curtis LeMay, Chief of Staff, U.S. Air Force, commented on this point, on page 390, by saying:

True, we have got all of these weapons, and we think we can deliver them now. But the situation never stays static. The side that has the best yield-to-weight

ratio has an advantage in their capability to put their weapons on targets sometime in the future.

2. THE TEST BAN WILL ELIMINATE THE DANGER OF FURTHER FALLOUT

As to this argument by the proponents, the question of fallout has been of concern to me as it has to most Americans, I am sure. There was virtual unanimity among the witnesses that the health risks from worldwide fallout due to past testing are very small. According to the experts, we receive far less radiation from fallout than we receive from naturally occurring sources, and some authorities maintain that a considerably larger amount would be acceptable to gain the benefits of peaceful uses of nuclear energy. The report of the Federal Radiation Council of May 1963

The revised estimates of the short-term per capita effective dose to the reproductive cells show that weapons tests conducted dur-ing 1962 will be about 47 millirems. All tests conducted through December 1962 will result in a per capita 30-year dose of about 110 millirems. This is about one-hundredth of the amount recommended by the National Academy of Sciences. These values are con-siderably less than the corresponding 30-year dose of 3,000 millirems from naturally occurring sources during the same period. Simitarly, the variations in dose-rate from world-wide fallout in different parts of the coun-try are less than the variations in dose-rate from naturally occurring sources in the inhabited parts of the world. Further, com-

parison with the 5,000 millirems per generation proposed previously by the Federal Radiation Council as a level of genetic risk that would be acceptable to gain the benefits of nuclear energy from normal peacetime operations and the 10,000 millirems per generation recommended by the NAS Subcommittee on Genetics as a "reasonable quota" for manmade radiation exposure of the general public indicates that present anticipated levels of fallout do not consitute an undue risk to the genetic future of the Nation.

Dr. Edward Teller, the noted nuclear physicist, had this to say about fallout, and his statement appears on page 489 of the hearings:

The one point which is most often emphasized, worry about fallout, is one-where we have clearcut evidence. We have increased the effects of natural radiation by 10 percent.

These effects of natural radiation have never been proved to be harmful. From the present level of worldwide fallout there is no danger. The real danger is that you will frighten mothers from giving milk to their babies. By that probably much more damples of the probably much more damples of the probably much more damples. mage has been done than by anything else concerning this matter,

Dr. John S. Foster, Jr., director, Lawrence Radiation Laboratory, Livermore, Calif., one of the most eminent and highly regarded young scientists in this country today, was asked the following questions by me during the hearings:

Just how great a factor is fallout from the standpoint of its danger to the health of the human race?

Dr. Foster's answer, which appears on page 622 of the hearings, was as follows:

One way to look at it would be to say that the fallout from all past tests affecting man for the next 50 to 100 years would be something like the same thing as deciding to live a few hundred feet higher above sea level.

I asked this question of Dr. Foster:

I am wondering if this is a factor which we, from a scientific standpoint, might be able to disregard in our attempt to reach a decision?

Dr. Foster answered by saying:

Yes, sir; from the technical point of view I believe it has no bearing on the major

I then made this inquiry of Dr. Foster:

If I may pose a hypothetical question, are you saying, in essence, that if you were a Senator with the knowledge that you possess in the scientific field, you would disregard entirely this factor in your reaching a deciston?

Dr. Foster answered thusly:

That is correct, sir; although it would be a very difficult position for me to put myself into. * * * For hundreds, millions of years, people have lived in this environment. We are talking about the fallout that is a few percent of that natural background, and we know that people have lived at a few thousand-foot altitude, under higher exposure levels over thousands and thousands of years, and we cannot decide whether this has hurt them or helped them or how it has affected

Dr. Glenn Seaborg, Chairman of the Atomic Energy Commission, and a supporter of the test ban treaty, made the following statement on the subject of

I should add, although I think it is probably well known, that the total amount of

radiation from fallout is only a small fraction of the radiation that we receive from natural background, from the radiation that is present everywhere.

The Senator from lowa [Mr. HICKEN-LOOPER] asked the following question of Dr. Seaborg:

Has science been able to pinpoint even one case where fallout can be scientifically attributed to radiation—that is, where one case of leukemia or bone cancer or things of that kind or mutation that can be scientifically attributed to fallout?

Dr. Seaborg answered the Senator from Iowa [Mr. HICKENLOOPER] like this:

Excepting these one or two freak cases of local fallout * * * I know of no case where a particular case could be attributed to fall-

On page 214 of the hearings the following colloquy occurred between the Senator from Georgia [Mr. Russell] an Dr. Seaborg:

Senator Russell. Dr. Seaborg, I read in the paper, I believe the day before yesterday, that there is twice as much radiation in milk today as there was 3 years ago.

Is that approximately right? Dr. SEABORG. That would depend on the section of the country that was being referred to. I would like to say that there are probably sections of the country where there is twice as much strontium 90 in the milk now as there was 3 years ago, yes, sir, Senator.

Senator Russell. Has that yet reached a point where it is sufficient to endanger the human family?

Dr. Seaborg. No, sir. Senator Russell. It is a long way from

Dr. SEABORG. It is a considerable distance from it, yes, sir.

On page 219 of the hearings the Senator from Rhode Island [Mr. PASTORE] and Dr. Seaborg had the following colloguy:

Senator PASTORE. As a matter of fact, you could bring about almost the same result by testing as you could through a nuclear war if you kept doing this promiscuously without any limitation, isn't that a fact?

Dr. SEABORG. Well, I think the factor, the amount in a nuclear war, would be greater by something of the order of a hundred as compared to the high rate of testing in peacetime, even the rate of testing that you have indicated.

Although Dr. Seaborg's statements are not to be inferred as an endorsement of fallout, it is evident that he does not endorse the exaggerated fears that have been expressed by some people throughout the country.

On pages 222 and 223 of the hearings we find this testimony by Dr. Seaborg. The Senator from Alabama [Mr. SPARK-MAN1 asked the following question:

Senator Sparkman. With reference to the fallout, you stated that you thought there had been some effect already on health and genetics particularly. Are there specific examples?

Dr. SEABORG. Oh, no. There are no---I don't think that we could, I am sure that we can't identify any specific examples of effect of fallout on health or heredity up until the present time. We know, we have approximate information on the effects of radiation on health and heredity, approximate information. We can relate these effects to the amount of radiation.

Senator Sparkman, In other words, you know that the effect can be produced pro-

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yided there is a sufficient amount of radiation to produce it?

Dr. Scapors. And because of these approximate relationships that have been established, and I emphasize the word "approximate"—I can't emphasize that too much relationships between radiation and certain effects on health leukemis hope capacity. effects on health, leukemia, bone cancer, heredity effects, and so forth, and because we know the amount of radiation present from fallout, we can make calculations that would indicate statistically how many people will in the course of time be affected by this small amount of radiation, and statistically these are very small figures, very small numbers of people.

But I do want to emphasize we should

avoid exposure to radiation as much as pos-

sible at all times.

Senator Sparkman, We did have the examples of the contamination of fish and of the area in some parts of the Pacific where Japanese fishermen were affected, did we not?

Dr. SEABORG, Yes. In some tests in the Pacific

Senator SPARKMAN. Of course, that was in a heavily infested or contaminated area.

a heavily infested or contaminated area.

Dr. Seabord, Yes, that was near an actual large weapons test, where the people were downwind from the fallout, and were subjected to a substantial amount of actual fallout on a small area. This is something that I am sure will never be repeated. This is what we call local fallout, that is in the immediate area of the tests. The local fallout, is on well understood today that this immediate area of the tests. The local fall-out is so well understood today that this would never be repeated in a weapons test situation, and that, of course, is the only situation in which local fallout would be a problem in a testing, in a peacetime situation.

There would be some hot spots because it is carried down by rain and various weather conditions, so that there is some spottiness in the level of fallout.

Senator Sparkman. Some areas could be-come dangerous while others were safe?

Dr. Seaborg. Yes, although I would hesitate to use the word "dangerous." I don't be-

lieve any area has become dangerous.

Senator Sparkman. I am not talking about now but if testing should be carried on.

Dr. Seaborg. Yes, in the future.

On pages 224 and 225 of the hearings, the Senator from Iowa [Mr. HICKEN-LOOPER] asked this question:

Isn't it a fact that the most skilled scien-tific evidence of geneticists and others were brought out in those hearings and that their best estimate of the number of cases of for instance, leukemia and bone cancer caused by natural radiation—not by the radiation of fallout or man-induced radiation, but by natural radiation—is in the case of leukemia natural radiation—is in the case of leukemia zero to 84,000—that is between zero and 84,000 cases—and in the case of bone cancer between zero and 14,000 cases? The zero means they still can't necessarily trace even one case?

Dr. SEABORG. Yes.

Senator Hickenhooper. For sure?

Dr. Seaborg. They can't say with certainty. Senator HickenLooper. That is right.

Doctor, I am quoting from the Federal Radiation Council and they start with zero.

Dr. Seaborg, Yes. Senator Hickenhooper, They don't start

with a few numbers.
Dr. SEABORG. Yes, I know.

Senator HICKENLOOPER. They start with zero to a possible number. Doesn't zero mean that they don't have even one case that they can confirm?

Dr. Szaborg, They don't have absolute proof.

proof.

On page 226 of the hearings, the Senator from Iowa [Mr. HICKENLOOPER] asked these questions:

Isn't it a fact that throughout history we have had mutations, that we have had ab-normalities in birth, even before anybody ever thought of letting off an atomic bomb. History is replete with countless instances of definite mutations.

Dr. SEABORG. Of course.

Senator Hickenlooper. Definite altera-

Dr. SEABORG. Oh, of course.

Senator Hickenlooper. Definite deficiencles and so on.

Dr. SEABORG. Yes. I think that is a known thing. Senator Hickenhooper. That has been

going on as long as we have any history,

Dr. SEABORG. Yes. But the question that is—a question that is—being vigorously investigated now by the biologists and the geneticists is how much of that is due to the natural background, how much of it is. due to the cosmic rays, to the radioactivity that is present in small amounts everywhere including a little bit in this table here, and other sources.

Senator Hickenlooper. Other unknown phenomena?

Dr. SEABORG. Yes and X-rays, medical X-rays, and so forth.

Senator Hickenlooper. These things occurred long before they ever heard of an X-rav.

Dr. SEABORG. Yes, that is true, that is more recent. But the cosmic ray background and the natural radioactivity present essentially, in small amounts, present essentially every-where, has been with us ever since there have been people on earth so this may have played

Senator Hickenlooper. Yes, Dr. Seaborg (continuing). Yet to be deter-mined with any exactitude.

On page 230 of the nuclear test ban treaty hearings, Dr. Seaborg says:

There is no doubt in my mind whatsoever that air pollution is a much greater hazard to the health of the people than is fallout.

Again, on page 243, Dr. Seaborg made reference to air pollution from exhaust contamination in this manner:

Pollution of atmosphere in our country in terms of the number of people, where it has adverse effects on their health, is clearly more dangerous than the situation from fallout with respect to adverse effects on the health, in my mind, in m opinion.

Mr. President, none of these eminent witnesses would have you believe that no risk whatsoever exists from fallout. However, the smal risk which does exist must be measured against the risk of Communist aggresssion which the free world may face if and when there comes a time when it no longer has nuclear superiority. The small risk from test fallout must be measured against the fallout which would result from a third world war launched by the Communists in the hope that they could wipe out the United States. It must be measured against the millions of deaths which would certainly occur if our nuclear deterent force were allowed to grow so weak that it failed to prevent war.

Mr. RUSSELL. Mr. President, the Senator yield?

Mr. BYRD of West Virginia. I yield. Mr. RUSSELL. I dislike to interrupt the very excellent address that the Senator is making, but on the subject of fallout I wondered if he had studied the position of the President of the United States, President Kennedy, when he announced resumption of testing on March 2, 1962.

Mr. BYRD of West Virginia. I had read it but I had not included it in my prepared statement.

Mr. RUSSELL. This statement, of course, was a compendium of the opinion of all of the most eminent scientists in our Government. The President of the United States would not have made this statement unless it had been carefully checked with all of our most eminent scientists. If the Senator does not object, I should like to read it into the RECORD at this point. It is a very brief statement.

Mr. BYRD of West Virginia. I shall be delighted to have the distinguished Senator from Georgia read into the REC-ORD at this point the statement to which he has referred.

Mr. RUSSELL. This is the President's statement by television and radio on March 2, 1962:

Natural radioactivity, as everyone knows, has always been part of the air around us, with certain long-range biological effects. By conservative estimate, the total effects from this test series will be roughly equal to only 1 percent of those due to this natural background. It has been estimated, in fact, that the exposure due to radioactivity from these tests will be less than one-fiftleth of the difference which can be experienced, due to variations in natural radioactivity, simply by living in different locations in the country.

This will obviously be well within the guides for general population health and safety, as set by the Federal Radiation Council, and considerably less than one-tenth of 1 percent of the exposure guides set for adults who work with industrial radioac-

No one recommends radioactivity or fallout. We all wish to keep it limited to the lowest possibly degree, but the danger of fallout has certainly been overstressed, as stated by the President and by the report of the Federal Radiation Council as of May 4, 1963.

This is the official agency of the U.S. Government that surveys this matter to determine when there is a hazard to the health of our people. They conclude their report by saying:

The Council concludes that the health risks from radioactivity in foods, now and over the next several years, are too small to justify countermeasures to limit intake of radionuclides by diet modifications or altering the normal distribution and use of food, particularly milk and dairy products.

The presently estimated radiation dose to

bone from all past (weapons) tests is about 465 millirem in 70 years, which is about onetwentieth (5 percent) the exposure from natural sources.

In other words, one gets more radioactivity by moving to Denver and living in that altitude than by conducting this comprehensive series of tests.

I thank the Senator and commend him for the great diligence he has manifested in preparing his excellent address.

Mr. BYRD of West Virginia. I thank the senior Senator from Georgia. I ap-

preciate his having placed in the RECORD the statement of President Kennedy on natural radioactivity and test fallout.

Mr. THURMOND. Mr. President, will the Senator yield?

Mr. BYRD of West Virginia. I yield to the Senator from South Carolina.

Mr. THURMOND. On the same point, I believe it is interesting to note what Br. Teller said on this subject. I do not believe the Senator has referred to this specific statement.

Mr. BYRD of West Virginia. I was coming to the point of quoting Dr. Teller, but I shall be glad to have the Senator give the quotation.

Mr. THURMOND. Dr. Teller made—this statement:

This argument, while it sounds simple and plausible, is wrong. Fallout has so small an effect that nobody ever has observed it. And nobody knows either from direct observation, or from statistics, or from any valid theory whether the claimed damages in fact exist or do not exist. I want to talk about that a lot more, because talking about the effects of various doses of radiation leads us immediately into an interesting field of research which should be important for all of us. The plain fact is that we do not know what are the effects of small doses of radiation.

We have heard that fallout produces a terrific genetic burden. To begin with, radiation from fallout is only 1 percent of the radiation which we are getting anyway.

Fallout is not dangerous. But the fallout

Fallout is not dangerous. But the fallout scare is. Many people know that a medical X-ray gives you 100 times as great a dose as fallout will give you in your whole lifetime. How many people have been scared away from X-rays? How many people have gone with their ailments unrecognized and untreated, only because there has been this needless and exaggerated fallout scare? I don't know. I don't know whether anybody has been killed by fallout, but I am sure that many have been killed by the fallout

Further on that subject, it may be interesting to note what the former Secretary of Health, Education, and Welfare, who is now a distinguished Member of the Senate, had to say on September 9, 1963. The Senator from Connecticut [Mr. Ribicoff] said:

We must face the fact that the land on which we live and work, the air we breathe, the water we drink and use in industry, agriculture and recreation have been altered over the past half century by a manmade fallout far more abundant and potentially more dangerous than the contamination of nuclear weapons testing.

I could quote many other authorities on the subject, but I thought it would be well for these two quotations to be brought in at this point.

I congratulate the distinguished Senator on the excellent address he is making. I shall have more to say as time goes on.

Mr. BYRD of West Virginia. I thank the distinguished Senator from South Carolina.

Dr. Teller had this to say, at page 428 of the test ban hearings:

There is radioactivity in the air. The total amount is less than 10 percent in its effects, 10 percent of the natural radiation to which all of us have been exposed for millenia.

Yet there is a point to not further increase this activity. Each year about 3 megatons worth of fission products decay. We could

agree with the Russians not to release in any year more than 1 megaton fission products. Neither we release more than 1 megaton nor do they release more than 1 megaton.

On page 429 of the hearings, Dr. Teller said this:

Under a ban of the kind that I describe, we could easily observe whatever the Russians or anybody else are doing. Under such a ban we would have the opportunity to acquire the knowledge we need about missile defense.

Under that ban we would be permitted to do all the work that we need to do in the Plowshare program, in the peaceful uses; all of this becomes the more possible because we have developed clean explosives and we can make our experimentation with the release of little radioactivity.

At page 455 of the hearings, Dr. Teller

Contamination in the atmosphere produces similar biological effects as a number of natural processes such as cosmic rays, radioactivity on the soil, radioactive potassium in the blood, in our blood. There are essentially no differences. The radioactivity in the atmosphere amounts in its worst biological effects over great numbers of people to 10 percent of the natural background.

We have increased an effect, of which it has not been proven that it is a dangerous effect. We have increased that effect by 10 percent. Anybody who lives in Denver is exposed to a greater increase due to the fact that there is more uranium in the soil there and that it is higher and the cosmic ray intensity is greater. People in Denver are in greater danger than the increases to which we have been exposed due to the radioactivity in the atmosphere.

Nevertheless, I have said and want to emphasize that it is reasonable to try to limit radioactivity in the air. We could do that by a special agreement drawn in a way proposed by Dr. Libby and myself 5 years ago, and we can make such an agreement without forgoing any of the tests or the developments which are needed for the military defense or which are needed for the peaceful applications.

I claim that these two questions, the test ban and the fallout, are linked only by propaganda.

Dr. Teller, at page 500, sums up this question rather aptly by saying:

Therefore, while fallout is no real problem from the point of view of health, it certainly is a great problem in connection with psychology and politics.

Dr. Austin M. Brues, Argonne National Laboratory, Lemont, Ill., had this to say during the 1957 hearings by the Joint Committee on Atomic Energy:

It would be rash to claim that small radiation doses have no effect on humans in increasing bone cancer and leukemia. But it would seem reasonable to conclude that if there is any increase in the incidence of these diseases because of fallout, it is so slight as to be unnoticeable when compared with other suspected causes of bone cancer and leukemia.

During the 1959 hearings by the Joint Committee on Atomic Energy, Dr. Brues made the following statement:

That we are on a reasonably secure basis can be illustrated if I rephrase the calculation I made at the earlier hearing, concerning the apparent hazard of cigarette smoking. In several countries of Europe it has been noted that the number of cigarettes consumed is in direct proportion to the incidence of lung cancer. If the radiation hazard at low levels is proportional to that at high

levels, the same is possibly true of the cigarette. Taking into account the present fallout levels it would follow that they are about as likely to produce leukemia in an individual as two cigarettes a year to produce a lung cancer, using the worst guesses in each case.

At this point I should like to quote an interesting passage which appears on page 124 of "Our Nuclear Future," 1958, by Edward Teller and Albert L. Latter:

We may summarize in this way. The fallout effect is below the statistically observable limit. It is also considerably less than the effect produced by moving from sea level to an elevated location like Denver, where cosmic radiation has a greater intensity. It is also less than having a chest X-ray every year. In other words, we know enough to state positively that the danger from the worldwide fallout is less than many other radiation effects which have not worried people and do not worry them now.

Of course, many nuclear tests have been conducted since Drs. Brues, Teller, and Latter made these statements in 1957, 1958, and 1959.

But current statements regarding fallout hazards reflect the same basic opinion as that which was expressed by wellinformed people in earlier years.

For example, Dr. Willard F. Libby, University of California, has this to say about the biological effects of radiation in "Nuclear Ambush," 1963:

Whatever the extent of our ignorance of the biological effects of radiation, we do know that these effects are not unexperienced by the human species, even from the genetic point of view, since it is clear now that persons living at high altitudes on granite rocks always have received extra radiation many times greater than is contained in radioactive fallout from the testing of nuclear weapons, and that even those living on certain sedimentary rocks at sea level always have received ten to twenty times the present fallout dose.

Earl H. Voss, author of "Nuclear Ambush"—the test ban trap—says some very interesting things about the dangers of radiation from fallout. On page 10 of the book, this statement will be found:

Fallout radioactivity would have to deliver doses hundreds of times greater than the present dose to produce detectable effects.

On page 21 of his book, Mr. Voss makes this statement:

Natural background gives the average individual a 7-roentgen radiation dose stretched over a period of 70 years. Fallout gives him 0.2 to 0.4 roentgen over the same 70-year period.

Mr. Voss continues on pages 22, 23, and 24 with these statements:

This excursion into the basic science of radiation has shown that the hazard of nuclear test fallout is trifling—3 to 5 percent—compared to background radiation hazards the world accepts without question. How distorted the thinking has become can be made clear by comparing fallout with other hazards, using some popular statistical techniques.

Over the past 20 years, in the United States, there have been six fatal accidents and a small number of injuries to atomic energy workers from ionizing radiation. For most of these 20 years automobile accidents have been causing more than 30,000 deaths per year. But each of the four radiation accidents that caused the six deaths among atomic energy workers has received world-

wide publicity; the fact that over 100 nuclear-energy workers have been killed in automobile accidents alone during the same period has gone unnoticed.

Smokestacks belch millions of tons of acid, silicone, beryllium, lead, and arsenic—all widely suspected to be cancer agents—while scientists are sifting the air for faint traces

of radioactive fallout.
Living in a brick house gives a person 20 times the radiation dose one gets from fallout. But world attention has been concentrated on limiting the strontium 90, not on finding a substitute for bricks. There is no known case of moving from a brick house to a frame house to avoid radioactivity.

Luminous-dial wrist watches give off as

much as 10 times the radiation dose that

fallout produces.
Science suspects automobile exhausts, as it suspects fallout, of producing cancer. But no one has suggested declaring a moratorium on automobile transportation, or even making a multimillion dollar investigation of auto exhausts.

Principally because of the fallout problem, science has been stimulated to learn much more about radiation as a cause of cancer and other health problems than it knows about almost any other occupational or environmental hazard. Benzpyrene, for instance, was discovered in the early 1930's to be a powerful cancer-producing agent in mice. Combustion of petroleum by autos mice. Combustion of petroleum by autos yields more than enough benzpyrene to produce a cancer hazard. In large American cities, there is so much benzpyrene in the air that it settles on windowsills in measurable quantities. But there has been no scientific investigation of the hazard of benzpyrene at low doses.

On the east coast, the annual radiation from natural sources is about 0.1 roentgen per year, while Denver and other large Coloradan cities get about twice that amount from natural background sources. Denver is expanding despite this health hazard. And New York reports a higher rate of leukemia than Colorado, presumably from causes other than radiation.

Mr. Voss thus makes the point that it is misleading to urge that this recently discovered factor-fallout-is the sole cause, major cause, or minor cause of cancers, bone tumors, and leukemia when ranged against "a whole spectrum of causes and changes."

Mr. President, the Communists have shown by their detonation of huge bombs that they are not worried about fallout. However, they have been eager to build up our fear of fallout to establish momentum for a test ban treaty which would be to their advantage.

I do not advocate that additional fallout would be beneficial, but I regret that much of the support for this treaty has been generated by hysteria about distorted and exaggerated dangers of fallout radiation.

Referring to the explosion of nuclear bombs, Admiral Strauss said, at page 685 of the hearings before the Committee on Foreign Relations:

Most of those which have been exploded in the intervening years, the fusion type of weapon has been involved with relatively less radioactive debris. The decay rate is not the same for all types of debris. Some of the fission products have very brief half lives; seconds and minutes. Some of them have many, many years. So that it is impossible for me as a layman to give you a clear picture of the totality. But of this I am assured, also on competent authority, that the total amount of radioactivity in the biosphere, that is to say, the air and the waters

and the lands, which has resulted from nuclear testing since the first bomb was tested at Alamagordo, is about 5 percent of the radioactivity experienced by people in the world who live in the civilized part of the world where we have medical and dental Xrays, and about 10 percent of the radioactivity experienced by the population of the world generally.

At page 686 of the hearing before the Committee on Foreign Relations, Admiral Strauss said:

As I understand it, there is a great divergence of opinion not only among the physicists, as was pointed out this morning, but among the geneticists. There are those who regard the most infinitesimal additions to the radioactivity in the atmosphere as deleterious. There are others who take the view that nothing, definitely nothing has been proved in either human or animal experimentation that would warrant such an assumption.

I read testimony, I read a newspaper account of testimony before this committee in which Dr. Seaborg, the Chairman of the which Dr. seaborg, the Unairman of the Atomic Energy Commission, stated, if I recall correctly, that industrial pollution of the atmosphere was a far more serious threat than radioactive pollution. We accept that as a necessary component of modern life. I accept the radioactive contamination of the atmosphere to the extent that it exists as a necessary component of being prepared to defend ourselves.

Admiral Strauss was referring to industrial pollution of the atmosphere, a far more serious threat than radioactive pollution.

One final interesting reference to fallout is to be noted in a colloquy between General Power and Senator Jackson appearing on page 38 of the released declassified testimony of General Power:

General Power. I am thoroughly familiar with the radiation problem as someone who writes a war plan and has to take this fall-out into consideration. I believe I have available to me the opinions of all the experts. There is by no means agreement among all the experts, but I do feel that, as a general statement, in some areas the danger of fallout has been greatly overexaggerated. I think the type of testing that we have done or that we had contemplated doing is well within the acceptable risk

It would be negligible, in relation to the natural fallout you are subjected to at all times, and that is what they are referring to in the difference between Denver and sea

Senator Jackson. On this question of fallout it is well to mention too, General, that as a result of nuclear tests the country became conscious of practices that had been indulged in by the medical and dental professions, shoe salesmen, and so on. knowledge of these practices resulted in corrections that have helped to safeguard people which would not have been made other-

I think that this is a very interesting point because, to my knowledge, more harm and more damage was being done by the careless practices, X-raying everybody for everything, shoe salesmen with the X-ray business for the feet, and dentists with the harm that many received as a result of poor practices in the handling of dental X-rays.

If nothing else, we have made the country alert to some of these practices that have been definitely harmful.

Mr. THURMOND. Mr. President, will the Senator from West Virginia yield? The PRESIDING OFFICER (Mr. BAYH in the chair). Does the Senator from

West Virgina yield to the Senator from South Carolina?

Mr. BYRD of West Virginia. I am glad to yield.

Mr. THURMOND. The Senator from West Virginia is making an excellent case in refuting the statements of those who claim it is dangerous to continue to produce fallout; and I commend him.

If the Senator from West Virginia will permit me to do so, I should like to place in the RECORD the testimony of Dr. Foster, which appears on pages 632 and 633 of the hearings before the Senate Committee on Foreign Relations.

Mr. BYRD of West Virginia. Certainly.

Mr. THURMOND. It reads as follows:

Senator Thurmond. Dr. Foster, on the quetsion of the fallout to which Senator BYRD referred to a few moments ago, that seems to be the question that is disturbing a great many people today who tend to favor the treaty where otherwise they might be against it.

On this question, if I recall correctly, last week or the week before some scientists made the statement that one would get more radiation from living in the mountains of Colorado than from fallout.

Dr. Foster. That is correct, sir. Senator THURMOND. That is correct.

I believe it is also true that one living in a brick house would get 20 times more radiation than he would get from fallout.

Ambush."

Dr. Foster. Yes.

Senator Thurmond, And one wearing a wristwatch with a luminous dial, as I have on here, would get 10 times as much radiation as he would get from fallout.

Dr. Foster. I am familiar with the arguments, sir. I do not know that a wristwatch-

Senator Thurmond. Does that sound reasonable? In other words, do those state-ments sound reasonable to you?

Dr. Foster. It is true that natural background is large compared with the additional activity, radioactivity, associated with fallout from all past tests.

Senator Thurmond. Isn't it a matter of fact that the fallout mentioned by some of those who favor this treaty, the propaganda that is being disseminated and the bugaboo that is being raised, that the fallout is im-perceptible, and is of little consequence?

Dr. Foster. I think, sir, that the problem or the question of fallout is of insignificance, of little significance, compared to the major issue with which the development of warheads is attempting to deal.

Senator Thurmond. What people want to know is this: We have been reading about fallout, fallout in milk, and fallout in food and resulting injury to the future generation. Is it possible for this fallout to bring about sterility and various other reactions?

I just want to ask you whether you feel that there is danger to people's health from the little fallout radiation resulting from the tests we have conducted?

Dr. Foster. No. sir. Senator Thurmond. Your answer is "No"? Dr. Foster. My answer is no. Senator Thurmond. Thank you.

I thought it might be pertinent to add that to the citations the distinguished Senator from West Virginia has presented in the course of his excellent address.

Mr. BYRD of West Virginia. It is very pertinent; and I thank the Senator from South Carolina

South Carolina.

Mr. STENNIS. Mr. President, will the Senator from West Virginia yield?

Mr. BYRD of West Virginia. I am glad to yield.

Mr. STENNIS. I thank the Senator for yielding to me. In view of the fact that I am compelled to attend a meeting, I must interrupt him now.

During the hearings of the Preparedness Investigating Subcommittee, I noticed that the Senator from West Virginia attended most of the hearings, even at the expense of his work schedule, which already was very heavy, indeed. I observed there his intense interest in the subject; and now I marvel at the thoroughness and the completeness of the fine speech he has prepared and is delivering today.

I have had an opportunity to glance through the printed copy of his entire speech; and I find it both learned, interesting, and sound. I predict that it will not be, and cannot be, effectively answered during this debate.

I believe his speech is in keeping with the very best stature and tradition of the Senate in sitting as a special constitutional body to consider treaties. His speech is also in keeping with the very fine stature of the Senator from West Virginia, who is not given to idle talk; instead, when he brings a matter to the attention of the Senate, his statement is one of substance.

I wish especially to commend him, too, for the very effective way in which he has dealt with the fallout question. He has thoroughly demonstrated that even when considered at its worst, the question of fallout really has no bearing on the question of the Senate's approval of the treaty.

I believe the Senator from West Virginia has made that point more clearly and more conclusively than anyone else has; and I look forward with pleasure to hearing the remainder of his excellent speech. I thank the Senator from West Virginia for it.

Mr. BYRD of West Virginia. Mr. President, I am very grateful to the Senator from Mississippi.

THE TEST BAN WILL SERVE TO DEEPEN THE RIFT BETWEEN RUSSIA AND RED CHINA

Mr. President, most of the differences between the Soviet Union and Red China can be boiled down to one basic question: How should the further prosecution of the Communist revolution pro-The basic threat is too often ceed? overlooked; the Soviets and the Chinese have one sacred and irrevocable goal: the destruction of capitalism, the destruction of any religion which acknowledges the existence of a Supreme Being, and the destruction of all systems of free government. The Chinese advocate brute violence as the means for advancing the revolution, while the Soviets are, at the moment, advocating more subtle approaches, through "peaceful coexistence," with emphasis on subversion, political machinations, and economic warfare.

The policy of peaceful coexistence does not simply mean "you live there; we live here." It is, in reality, a sophis-

ticated doctrine of aggression, relaxation of tensions, retreat, and advance. By no means does it approach the state of genuine peace. Khrushchev, on January 6, 1961, described peaceful coexistence as follows:

Peaceful coexistence is the high road of international relations between socialist and capitalist countries. The policy of peaceful coexistence * * * is a form of intense economic, political, and ideological struggle against the aggressive forces of imperialism in the international arena.

Thus, peaceful coexistence is to be construed as a continuation of the battle against our system of government and our way of life; and it does not mean that war has been discarded as an instrument of achieving victory.

The crux of the issue between the Soviets and the Chinese concerns the Western observations utility of war. may have magnified this dispute out of proportion, and may have reached hasty judgments concerning the Sino-Soviet split. Some commentators have gone so far as to predict that the Soviet desire for a détente with the Wset stems from the realization that the United States and the Soviet Union will have to join forces to contain Red China. However, we should remember that a few years ago Khrushchev and Tito were at each other's throats, whereas we have just witnessed 15 days of back-patting, folk dancing, and general joviality between Tito, the man who earlier was being denounced, and Khrushchev, the de-nouncer. This turnabout within the Communist world may occur again in the case of Red China. We cannot be certain that the quarrels will not be patched up and that Sino-Soviet cooperation will not begin again. As a matter of fact, in the absence of any inspection right to accompany this treaty, we will never be able to ascertain wheth er a nuclear test by China—which would not be a violation of the treaty, inasmuch as China has not signed it-was assisted by the Soviet Union.

The rapprochement we have just witnessed between Mr. Khrushchev and Mr. Tito may, indeed, signal a new and gigantic offensive to bring about more trade with the West. It was reported that one of the major interests of Khrushchev in his tour of Yugoslavia was the tangible benefits of Yugoslav coopera-tion with Western countries. It was reported that the Soviet leader toured factories operated under British and Italian licenses as well as a plastics and chemical factory built with funds from the U.S. development loan fund where he observed firsthand the fruits of cooperation with the West. Perhaps we will now find Khrushchev seeking goods from us that are in short supply in the Soviet Union, such as computers, data-processing machines, and other complex products. It would not surprise me to find the Communists seeking a loan to help the Soviet bloc's Council for Mutual Economic Assistance. Perhaps we will even find the Communists seeking to discuss a lend-lease settlement as a starting-point for obtaining aid from us. This is not improbable because the Soviet Union is one of the very few countries with whom a settlement on lend-lease accounts has not been reached. Or we may find that

the Soviets will launch a different type of economic warfare, undermining Western export trade by flooding choice markets with low-priced goods, possibly even using Yugoslavia as a transshipment post.

Mr. President, I wish that the present rift between Russia and Red China could be considered deep, lasting and irreparable. I doubt that the pages of history will reveal such to be the case. It may be quite possible, however, that, as a result of the treaty, Red China may feel the need to undertake hostile acts against the Indian subcontinent or other areas as a manifestation of her Marxist orthodoxy, and such hostile acts could, of course, involve Great Britain and the United States in the defense of these areas.

Admiral Strauss as shown on page 691 of the hearings, had the following to say about China and Russia:

Admiral STRAUSS. Well, I have the feeling that the temporary breaches between dictators are like those between monarchs in the Middle Ages. They develop quickly and they heal quickly, and inexplicably. I pointed out—I don't know whether you were here, Senator—that I had seen photographs this morning in some of the daily press showing Mr. Khrushchev and Mr. Tito embracing. Not so very long ago they were with daggers drawn. Who would know on what day Mr. Khrushchev and Mr. Mao Tsetung would compose their differences?

It seems to me so flimsy a road upon which to base our foreign policy that I considered dropping it from my statement this morning.

Certainly, Mr. President, all that glitters is not gold, and the lessons of the past should long ago have taught us that the words of Lenin, the founder of the Soviet system, have never been deviated from by the Communists in their drive for world conquest:

We have to use any ruse, dodges, tricks, cunning, unlawful method, concealment, and veiling of the truth.

General LeMay voiced the same opinion that was voiced by Admiral Strauss. The testimony appears on page 362 of the hearings. General LeMay said:

General LeMay. I think they probably have some differences of opinion. But I believe that they are mostly on how to advance world communism, and it is my opinion if there was any real trouble in the world we would find that very quickly Russia and China would get back together again. They do have a mutual defense pact, and I certainly think it would be invoked and operating efficiently if it was necessary.

Senator Arken. If the United States had trouble with either one of them, you think they would get together again? If China becomes very aggressive toward India or other countries in southeastern Asia, do you think Russia and China would get together then?

General LeMay. I think they would; yes. As a matter of fact, China has a very vigorous program in southeast Asia now. Russia knows about it, and probably agrees with it.

THE TEST BAN WILL CONTRIBUTE TO A LESSENING

OF TENSIONS AND BE A STEP TOWARD OTHER
AGREEMENTS AND EVENTUAL PRACE

Those who advocate the treaty as a way of lessening tensions forget that the very nature of communism suggests that an atmosphere of tension is the desired political atmosphere in which to press

Communist goals. Nathan Leites, in "A Study of Bolshevism," 1953, alerts us to the attitudes and methods of our adversaries as follows:

To Bolsheviks, the high tension is the normal state of politics. They do not experience it as something that just cannot go on, but rather as something that necessarily persists. What Westerners call a real agreement seems to Bolsheviks inconceivable. It is often predicted in the West that if particular issues * * * could be settled with the Politburo, an easing of the overall tension might ensue. For Bolsheviks, this does not follow. There might be less noise, but the basic situation—the presence of two blocs attempting to annihilate each other—would be unchanged.

If the Soviets genuinely desired to relieve world tensions they could easily do so by tearing down the wall separating East Berlin from West Berlin. They could ease international tensions by permitting the reunification of Germany through free elections. They could relieve tensions by withdrawing their armies from the captive countries of Eastern Europe. They could even go so far as to withdraw their men and armements from Cuba. These are but a few of the genuine causes of world tensions. of the genuine causes of world tensions and the Soviets could easily show their good faith by promptly acting to remove these causes. And speaking of Cuba, may I, parenthetically, recall to mind that Andrel Gromyko, the Soviet Foreign Minister who signed the nuclear test ban treaty for the Soviet Union, falsely told President Kennedy on October 18, 1962, that the missiles which had been sent to Cuba were purely defensive. I quote from President Kennedy's broadcast of October 22:

Only last Thursday, as evidence of this rapid offensive buildup was already in my hand, Soviet Foreign Minister Gromyko told me in my office that he was instructed to make it clear once again, as he said his Government had already done, that Soviet assistance to Cuba, and I quote him, "training by Soviet specialists of Cuban nationals in handling defensive armaments was by no means offensive," and that, "if it were otherwise," Mr. Gromyko went on, "the Soviet Government would neve become involved in rendering such assistance."

That statement was false. In other words, the President meant that Mr. Gromyko was a liar.

It is less than a year since attention was publicly called to this falsehood, less than a year since the Soviet Union took the world to the very brink of nuclear war—less than a year since Senators were notified to attend briefings in various parts of the United States in connection with the Cuban crisis. Yet, we are called upon to consent to a treaty with the nation, which so recently demonstrated it still harbors the aim of world conquest, signed by the very man who lied to our President.

The free world has all too often been willing to accept at face value every apparent shifting of Soviet lines in the ideological arena. Yet, shifting Soviet positions have just as often simply confused the issue, compounded the complexities, and created a climate of crisis rather than a lasting lessening of tensions. Leites refers to the alacrity and

purpose with which the Soviets are able to change position. He says:

Westerners have often commented that there is, in negotiating with the Soviet Union, no common search for a solution to common problems, no discussion in the western sense of the term; the Soviet delegates elaborate or change their position in strict isolation and then present it in dogmatic fashion. They fairly take account of the views and objections of the other side.

We must ever be wary concerning what may appear to be a concession or a modification of position or retreat. In this connection, Lenin wrote:

Revoluntionary parties must go on learning. They have learned how to attack. Now it is time for them to realize that this knowledge must be supplemented by acquiring a knowledge of how best to retreat. We have got to understand (and a revolutionary class learns this by bitter experience) that victory can only be won by those who have learned the proper method both of advance and retreat. (Works, Russian edition, vol. XVII, p. 121.)

Stalin, in one of his lectures in 1924, explained the purpose of such retreat in this way:

The object of such strategy is to gain time, to scatter the forces of the enemy while consolidating our own for a future advance.

Mr. THURMOND. Mr. President, will the Senator yield at that point?

Mr. BYRD of West Virginia. I yield to the Senator from South Carolina.

Mr. THURMOND. Since the Soviets conducted tests in 1961 and 1962 and got ahead of the United States in high-yield weapons, I wonder whether they might not wish to gain time—to buy time—in order to develop the weapons in accordance with the knowledge they have gained. Therefore, they may be tendering the treaty for that purpose.

Mr. BYRD of West Virginia. I have no doubt that this is one purpose, if they are indeed ahead; and I do not

doubt that they are.

Mr. THURMOND. From 1958 until September 1961, there was a moratorium on testing. During that time the Soviets prepared carefully and assiduously, then suddenly broke the moratorium and immediately went back to testing. They gained time to prepare for testing. They now have tested. It is highly possible that they wish to gain time to manufacture the weapons with which to try to destroy us during the pendency of the treaty.

Is there any doubt in the Senator's mind that as soon as the Soviets feel they are ready with their weapons they will take the next step? It is a Communist trick to take two steps forward and one back—two forward and one back—for so long as they are moving two forward and one back they are gaining. Does the Senator have any question at all that when the Communists are ready to proceed with their next step they will not hesitate to violate the treaty, abrogate the treaty, or pursue some course which would force the United States to abrogate the treaty?

Mr. BYRD of West Virginia. I have no doubt that the development which is predicted by the Senator from South Carolina will ensue, as I shall show later in my statement.

The Soviets have frequently sought release from international tensions in order to be able to solidify and increment their warmaking or defense capabilities. Many people view the present treaty as the first sign of dawn on the horizon of genuine peace. Peace, to be sure, is our strongest desire, and toward that goal we must continue to strive. But it may be timely to recall the Biblical admonition: "When a strong man, armed, keepeth his palace, his goods are in peace." It is equally necessary to remember that the Communists frequently do not interpret words as we interpret them, and this may be equally true of the word peace. As to the evolvement of peace from the signing of this treaty, I call the attention of the Senate to a reference, made by Admiral Arleigh Burke during his testimony on the treaty, to the statement of a Radio Moscow commentator on August 1, midway between the initialling and signing of the treaty. Admiral Burke quoted the Moscow commentator as follows:

The argument that some newspapers and politicians are harping on more and more persistently is that Soviet policy is undergoing some changes. And some people even go so far as to make the ridiculous assertion that the Soviet Union has openly renounced Lenin's doctrine, and has actually stated that war is impermissible as an instrument of policy. Facts do not back up this absurd contention.

The Moscow commentator went on to say:

The initialing of the treaty to ban nuclear tests in the three elements is therefore a direct result of the fight waged by the Soviet Union for many years, and it is certainly not a result of any change in Soviet policy, or departure from Lenin's principles.

Admiral Burke continued in his own words:

Hence, it would appear to even the casual observer of Soviet reaction to the current state of affairs that the Soviets themselves view the test ban treaty as a "victory for the policy of peaceful coexistence."

Admiral Burke proceeded then to indicate, as I have already indicated, that "the interpretation of peaceful coexistence is crucial."

Peace, in the eyes of the Communists, is but a masquerade under which war is waged by new techniques. Infiltration and subversion, espionage, propaganda, the fear complex, group pressure, nuclear blackmail, all these and more, signify a peace that is not peace, a war that is not war.

Referring to the argument being advanced with reference to reduced tensions, Admiral Strauss, as shown on page 691 of the hearings on the test ban treaty, commented thusly:

Reduction of tensions. I am not satisfied—I am not sure that the reduction of tensions is necessarily a good thing. Our tensions were very much reduced following the moratorium and I can give you at least one result of it. We abandoned our proving ground in the Pacific, that costly installation there which had involved an outlay of many millions of dollars, and a result was that when the President decided very properly to resume testing after the Russians had resumed, it was a matter of months, some 7 or more months, before we were able to pick up where we had left off.

And so, genuine peace, that bright crown for which mankind has so nobly aspired throughout the ages, is as elusive today as ever. Indeed, 2,000 years ago, a humble Nazarene warned us that the prize would continue to fiee from our grasp when He said, as recorded in the 24th chapter of the gospel according to St. Matthew:

And ye shall hear of wars and rumours of wars; see that ye be not troubled; for all these things must come to pass, but the end is not yet.

For nation shall rise against nation, and kingdom against kingdom; and there shall be famines, and pestilences, and earthquakes, in divers places.

THE TEST BAN TREATY WILL SLOW, OR SIGNAL THE END OF, THE ARMS RACE

Mr. President, the treaty, in the words of Secretary of Defense McNamara, "will not end the threat of nuclear war. It will not reduce the existing stockpiles of nuclear weapons. It will not halt the production of nuclear weapons." Additionally, the treaty will not prohibit the use of nuclear weapons in war. It is unnecessary to state that it has equally no bearing whatsoever on the development, production, and use of conventional weapons.

The President of the United States in his message to the Senate said:

This treaty advances, though it does not assure, world peace; and it will inhibit, though it does not prohibit, the nuclear arms race.

While it does not prohibit the United States and the Soviet Union from engaging in all nuclear tests, it will radically limit the testing in which both nations would otherwise engage.

While it will not halt the production or reduce the existing stockpiles of nuclear weapons—

The President said-

it would be a first step toward limiting the nuclear arms race.

While it will not end the threat of nuclear war or outlaw the use of nuclear weapons—

He went on to say that—

it can reduce world tensions, open a way to further agreements, and thereby help to ease the threat of war.

Secretary Rusk, on page 13 of the hearings, stated:

This treaty does not affect the use of nuclear weapons in war. It has to do with nuclear weapon testing in time of peace.

On page 28 Secretary Rusk said:

There is nothing here that interferes with the production of nuclear weapons, for example, the deployment of nuclear weapons, the use of nuclear weapons in war.

Secretary Rusk said, as shown on page 29:

This treaty itself does not reduce weapons in being or prevent their further production.

Mr. Khrushchev in his speech on July 2, in Berlin, expressed a similar understanding. After stating the willingness of the Soviet Government to conclude a limited agreement banning nuclear tests, he said this:

Of course, an agreement on the ending of nuclear tests, notwithstanding all the importance of this major act, cannot stop the arms race, and cannot avert or even sub-

stantially weaken the danger of thermonuclear war.

Gen. Curtis LeMay, Chief of Staff of the U.S. Air Force, said this, as appears on page 371 of the test ban treaty hearings:

I would think-

Referring to the treaty--

It would have no effect on the production of weapons or the knowledge we now have. Certainly Russia is going to produce all the tactical weapons that it considers it must have, as we would, of the kind we now build. It may slow down the modernization of the stockpile, if we want to speak of it in that regard.

It quite possibly would slow down the research and the advance in weapons of some

General LeMay went on to say, as appears on page 401:

I don't think we are any farther or any closer to a nuclear war with or without the test ban treaty.

Senator Arken. I don't think anyone can answer that, anyway.

General WHEELER. I think you have to recognize this, Senator, that this test ban treaty doesn't lessen the number of weapons in stockpile, it doesn't change the production of weapons, and I think we would all agree that the threat is still the same. In other words, I believe the objectives of the Soviets are still world domination. So you have about six of one and a half dozen of

I read from pages 404 and 405 of the hearings:

the other, I would say.

Senator Curts. Well, now, the next question has to do with money and may I preface it so that the record will be clear.

I think we have to have the top defense regardless of what it costs and I believe that the American people are of that opinion. Never in the history of the United States have they kept up the degree of preparedness we have and the people accept it gladly, whether it is an extension of the draft or heavy appropriations and the rank and file of people that I meet on Main Street of the towns of Nebraska, they want this country defended and they are not complaining about it.

But just as a matter of information, if the safeguards that you favor are adequately carried out, is this test ban, would this test ban, then be a moneysaver?

General WHEELER. On the contrary, I would say, Senator, if I may offer my opinion first. As I look at it, the military threat to our security from the Soviet Union specically and from the Communist bloc in general, is not lessened in one degree by this particular treaty.

The safeguards also, in my opinion, are going to cost sums of money over and above the sizable military budget that the chairman pointed out this morning.

General LEMAY. I would agree that the military budget will probably go up as a result of the treaty, not down.

In view of what these witnesses have said, therefore, Mr. President, I cannot agree that this treaty will signal the end of the arms race.

Even if both sides were scrupulously to abide by the treaty, we are assured that the safeguards stipulated by the Joint Chiefs of Staff will, fortunately, be implemented. Consequently, we say, we will test underground aggressively; we will maintain our laboratories in a high state of readiness for the possible resumption of atmospheric testing; and we will improve our system of monitor-

ing tests which may be conducted surrepetitiously in violation of the treaty. I think we can be sure that the Soviets will attempt to exploit every advantage gained during the course of the postmoratorium atmospheric tests. Thev will exploit and press their lead in highyield weapons. Both sides will do everything possible to develop and deploy an antimissile missile system. If, as it is said, we are ahead of the Soviets in tactical nuclear weapons, they will strive to overcome our lead while we strive to maintain it. As to the production of conventional weapons, this will continue unabated, and perhaps even be accelerated. The end of the arms race is nowhere in sight and, in all probability, will be as elusive as ever when the treaty becomes a fait accompli.

THE TEST BAN WILL MAKE IT MORE DIFFICULT FOR RUSSIA TO CATCH UP WITH THE UNITED STATES IN THE FIELD OF NUCLEAR EXPLOSIVES

Those who advance this argument say that underground testing is considerably more expensive than atmospheric testing and that, in view of the fact that this will be the only environment in which tests may be conducted under the treaty, the financial burden upon the Soviets will be such that they will be inhibited from progressing as rapidly as they would otherwise progress in catching up with the United States in the field of tactical nuclear weapons. It is also said that we are further along in the state of the art, insofar as underground testing is concerned, and that this will make it doubly difficult for the Russians to catch up. Of course, the very nature of the Soviet society makes it difficult for us to be absolutely positive that we are ahead of the Russians in the development of tactical nuclear weapons. It is possibly an assumption based on another assumption, to wit: That we have conducted more underground tests than have the Soviets and we have, consequently, made greater progress in this area of testing. Dr. Edward Teller, in his testimony before the Preparedness Investigating Subcommittee, said:

It is by no means certain that the United States is ahead of the Soviet Union in the knowledge of producing and using nuclear weapons. In the field of big weapons, Russian lead has been demonstrated before the eyes of the world. In this category Russian tests decisively outnumber United States tests.

In the category of smaller weapons, from a few kilotons to a megaton, the known Russian tests are somewhat fewer in number than the American tests. It is possible, however, that we may have missed quite a few Russian tests in this range. In the important subkiloton range (deleted). There is no objective justification to assume, as is usually done, that in this area we are ahead.

General LeMay had this comment, as appears at page 391 of the hearings, with reference to the oft-repeated statement that we are ahead in the field of low-yield nuclear weapons. His statement was prefaced by this question, which was put by the Senator from Rhode Island [Mr. PASTORE]:

But I had asked you a question previous to that, and I asked you whether or not the balance of power, nuclear power, was in our

fayor overall against the Russians, and you

said it was in our favor.

Now, if that is true, if it is in our favor, and we stopped there, what have we got to lose?

General LEMAY. Well, if it would stay there, probably we wouldn't have much to

But I wonder whether it is going to stay there or not, and, in addition to that, this is just our estimate of the situation. Our delivery capabilities, I think, at the present time are better than the Russians. That doesn't mean they are going to stay that way.

I think we have more weapons and a great-er variety of weapons now than the Russians have. That doesn't mean it is going to stay

that way.

The thing that worries me is that this preserves the uncertainties that we have in our mind now for as long as the treaty is going to be in effect [deleted].

We just don't all know the things we would

like to know about the vulnerabilities of [deleted] systems [deleted].

Senator Pastore. Can I interrupt you there, General? Do you think that the Russians know?

General LeMay. They may know a great deal more about it than we do, as a result of the last two series of tests that they have [Deleted.]

This bothers me, and one of the things that I don't like is that if this is true and they do know more than we do, they may know something that is vital. They may have been able to pick up a weakness in our defense system that they can exploit.

There is some reason for them wanting this treaty when they didn't want it on two occasions before. What is it?

General LeMay went on to say:

These are the disadvantages that we see. They are possibilities and we certainly have tried to say that even with the safeguards that we have suggested that we have, that certainly ratifying the treaty is not without tts risks.

Now, I pointed out these other uncertainties, that we don't know. For instance, [deleted] that the Russians are ahead of us in the high-yield spectrum, we are about equal in the [deleted] megaton range, and we are ahead in the lower [deleted] range.

Now, I can't prove otherwise, but I am very suspicious.

General LeMay here was expressing his suspicions as to the assumption that the United States is clearly in the lead in the field of low-yield nuclear weapons. He said:

Now, I can't prove otherwise, but I am very suspicious, because we know [deleted] that the Russians were planning a test program [deleted] before they broke the moratorium and started testing. [Deleted.]

Senator Pastors. I agree.
General LeMay. They may have been preparing for it longer.

Now, when they did break the moratorium and start their testing program, [deleted] the size of the program, and the comprehensiveness of it, this is an area where we could detect the explosions and learn something about it.

I can't quite swallow [defeted] that they didn't do equally well in the lower ranges where [deleted] what they were doing.

I am inclined to agree—
Again referring to the statement that we are ahead in the field of low-yield nuclear weapons-

I am inclined to agree with it because I can't prove it otherwise. But I am suspicious, and there may be a possibility here they are ahead throughout the spectrum.

Now I will admit [deleted] technicians say that the odds are against [deleted] but they also say there is a possibility.

Therefore, one of our key military men, Mr. President, as I have just read, questioned the statement, and indicated a strong suspicion that perhaps we are not really ahead in the low-yield nuclear weapons field.

At page 407 the Senator from Idaho [Mr. Church] said:

The area within which tests will continue under the treaty, as I understand your testimony, is in that field where we feel we have the greatest experience and have made the most advances; is that correct?

Of course, that is the low-yield nuclear weapons field.

General LeMay answered:

We think; I am not sure of it. I am probably less sure than the other two Chiefs. But this is the general consensus of opinion, but one that I worry about particularly.

I, too, worry about it, Mr. President.

A point that should be emphasized is that the test ban will render it impossible for the United States to catch up with the Russians in the area of high-yield weapons because of the ban on atmospheric tests, while the Russians will be permitted, by the treaty's terms, to conduct underground tests and, thus, catch up with us in the tactical nuclear weapons field where we think we are ahead. In summation, we may be kidding ourselves when we depend upon our being ahead of the Russians in the field of small weapons, and I have no doubt that we are kidding ourselves when we argue that this treaty will make it difficult for the Russians to catch up in this field.

History will show that the Soviets have not been disconcerted when confronted with difficult problems. They produced the atomic bomb long before we thought they could produce it; they produced the hydrogen bomb long before we predicted; and they launched Sputnik I, to our consternation and amazement. Moreover, while our feats in putting astronauts in orbit have been remarkable, the Soviets have excelled us. Who will say that these achievements have not been difficult or expensive? It is obvious that they have required the marshalling of tremendous energy, brains, and money.

The Soviets have shown that they can make rapid advances in research and development when they contribute maximum effort and emphasis to the task.

Additionally, there is always the possibility that the Soviets will make a major breakthrough in nuclear technology which will permit them to achieve substantial reductions in cost.

Soviet national resources may be under heavy strain, but this does not mean that even greater stress cannot be put upon them. The Soviets repeatedly have put their national resources under great strain, but this has never inter-fered with their determination to secure supremacy, for example, in space re-search and exploration. Yet, the Soviet leadership evinced little apparent concern that the Soviet population was made to suffer through strictures on consumer goods. As a matter of fact, the

people of the Soviet Union apparently have always been willing to make whatever sacrifices appeared to be necessary, and I am sure that they stand ready today to make whatever further sacrifices are required of them by their leaders.

There are those who said that Cuba would prove to be too expensive for the Soviet Union, but that theory has thus far proved to be false. As Adm. Arleigh Burke stated in his appearance before the Preparedness Investigating Subcommittee:

Cost alone should not be the standard measurement for our attempting to explain what is and what is not in the best interest of any enemy nation. The use of criteria which normally we would apply in attempting to clarify a given course of action for the United States will be of little value when applied to the motives or desires of a totalitarian adversary. Far too often the Com-munists have defied reason and logic to pursue seemingly impossible objectives; and far too often we have made false assessments of their ability or willingness to pursue those impossible objectives.

Mr. President, I do not think that any of us can be absolutely sure that we are actually ahead of the Russians in overall nuclear technology. Yet, with few exceptions, one after another of the witnesses who appeared to support the treaty stated it as his opinion that the United States now enjoys technological superiority over the Soviet Union and will, through its participation in the proposed test ban treaty, maintain that superiority. According to this argument, parity between the Soviet Union and the United States does not now exist nor will it ensue in the foreseeable future. Secretary McNamara pointed out in his statement that:

This prolongation of our technological superiority will be a principal direct military effect of the treaty on the future military

He referred to our technological superiority and said it would be prolonged under the treaty. Yet at page 113 of the hearing Secretary McNamara had something interesting to note. The Senator from Rhode Island [Mr. PASTORE] had made this statement:

I would like to pursue that just a little bit. You do concede in your statement that insofar as the extremely large yield weapons are concerned the Soviets do have superior-

Secretary McNamara. Yes, sir; I do. Senator Pastore. In the smaller tactical weapons, which can be tested underground,

we have superiority over them?
Secretary McNamara. I believe so, although I can't state that with absolute

Therefore, Secretary McNamara could not say with absolute certainty—nobody can say with absolute certainty—that even in the smaller tactical weapons field we have superiority over the Soviet

We are to believe, nonetheless, that the treaty will insure our continued superiority and the Soviets' inferiority for the foreseeable future. The Soviets appear, by this argument, to be willing to freeze themselves in a position of inferiority vis-a-vis the United States. If, in fact, they have resigned themselves to such a

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position of strategic inferiority, it would follow that they must have renounced their goal of world conquest and the destruction of our way of life. But, as Secretary of State Dean Rusk pointed out in his statement during the hearings:

We have no basis yet for assuming a fundamental change in Soviet objectives.

Moreover, the statement of the Joint Chiefs of Staff emphatically points out that, "We must not for a moment forget that militant communism remains committed to the destruction of our society." It is hard to believe that the Soviet Union would agree to a treaty, which, if faithfully adhered to by all parties, would guarantee the long-range inferiority of Soviet strength and the concomitant failure to achieve Communist goals. It is interesting to note, in this connection, that on August 5, the day on which the treaty was signed in Moscow, the official Tass statement included this passage:

Does conclusion of a treaty banning the tests after the present balance of power? No; it does not. The Soviet Government would never have agreed to the conclusion of such a treaty if it placed us in an unequal position, if it gave unilateral advantage to the other side. All this does not require special proof.

As one can see, while we have been assured that we possess technological superiority, the Soviet Union claims itself to be superior in nuclear technology. This creates doubt in my mind that we possess facts which really assure us as to who is ahead of whom at this stage of the game. As Adm. Arleigh Burke, U.S. Navy, retired, stated, in referring to our vaunted technological superiority over the Soviet Union:

This superiority has been claimed so often that I fear it has become automatically accepted as being fact. What is not generally realized is that this statement is not founded on hard evidence, but rather is the result of speculation. It is of interest to note that the Soviets claim to be ahead of us in nuclear weapons technology. Whereas this claim need not be accepted necessarily, neither is it possible to reject it unequivocally.

Our own military leaders and scientists state that the Soviet Union is, without doubt, ahead of the United States in the high yield range, and that the treaty will permit the Russians to retain the advantage in this field. At the same time it will permit the Soviet Union to make gains, through underground tests, in the development of tactical nuclear weapons, a field in which we are supposedly ahead. In other words, we will be prevented from catching up with the Russians where they are admittedly ahead, and they will be permitted to catch up with us where we are presumably ahead.

THE TEST BAN WILL SLOW DOWN THE PROLIFERATION OF NUCLEAR WEAPONS

Most persons will probably agree that the proliferation of nuclear weapons may be slowed as a consequence of the ban, particularly among law-abiding democracies which are friends and from which we have nothing to fear. Moreover, scores of the nations which have signed the treaty would probably never develop nuclear weapons or become nuclear powers in any event. The same cannot

be said, however, for Communist countries and dictatorships which may have the potential and the motive and which can develop nuclear explosives secretly.

As Dr. Edward Teller stated before the Preparedness Investigating Subcommittee:

The only technical comment which is relevant is the observation that the development of nuclear weapons is easy once nuclear materials are readily available. Starting with the 1955 Atoms for Peace conference we have made it very sure that in the course of time nuclear materials will become available on every continent. Once a country is in the possession of a few kilograms of plutonium simple experiments that can be carried out in secrecy can produce a small nuclear explosions are sufficient to give the needed assurance and experience to a country which intends to use these explosives on a relatively small scale.

The treaty will indubitably not prevent the proliferation of nuclear weapons insofar as Red China and France are concerned. In fact, France is already a nuclear power. Red China is evincing the determination to become one. Neither of these nations has indicated a willingness to become a signatory.

What Russia will do when France progresses in the state of the art remains to be seen. One might venture to guess that this could furnish the pretext for Russia's abrogation of the treaty.

Furthermore, the treaty will not prevent nuclear weapons passing into the hands of additional nations by purchase, by loan, or by transfer. It will not prevent or prohibit one nation giving to another design or production knowledge. It will not prevent any nation from acquiring the means to produce plutonium—and possession of plutonium is the key to the atomic bomb.

In the final analysis, it will not prevent testing. In fact, the treaty tends to remove whatever moral restraints previously attached to weapons tests by essentially legalizing the testing of weapons underground. Let no one imagine that the treaty will frustrate the testing of weapons by any nation which has made a decision to become a nuclear power, and which has allocated the resources and expended them on the research, development, and production programs which must necessarily precede a weapon test.

ARGUMENTS AGAINST THE TREATY

Mr. President, I now proceed to the main arguments against the treaty, as I see them. I am opposed to the treaty mainly for the following reasons:

First. The treaty is difficult of exact interpretation.

Second. There is danger of clandestine testing by the Soviets.

Third. There is danger of surprise abrogation by the Soviets.

Fourth. The treaty will result in euphoria in the West.

Fifth. Military superiority will shift to the Soviets.

Now I shall attempt to elaborate upon each of these.

THE TREATY IS DIFFICULT OF EXACT INTERPRETATION

On July 26, 1963, a New York Times correspondent quoted a State Depart-

ment source as having stated that the wording of the Nuclear Test Ban Treaty was "disturbingly imprecise." It is difficult to disagree. For example, under the terms of the treaty, what constitutes an "underground" test? Much depends on the interpretation of "underground." Must an "underground" test be one that is totally confined? Shallow tests conducted just beneath the surface may produce much more valuable information than tests at greater depths. Such shallow tests are also more economical. Yet, what is mean by "underground" tests may be open to question. In the report of the Senate Committee on Foreign Relations, September 3, 1963, page 22, Secretary of State Rusk is quoted as saying:

Obviously this treaty permits a clear underground test where the explosion is underground, where the testing apparatus is based on that phenomenon, and I would think we would not think that it applied to a surface explosion which was christened by a few shovelfuls of dirt.

But even though venting accompanies a low-yield underground explosion it cannot necessarily be detected, identified, or verified. What then will be the Soviet definition of "underground" and will it be broader than the U.S. definition?

The question of what constitutes an "underground" test may, however, be purely academic. The pressure of world public opinion may be brought to bear as a reason for the cessation of underground testing even though permitted by the treaty. Already the Soviet Union has laid the groundwork for a psychological warfare campaign to keep the United States from carrying out what is provided for by the treaty. The official Soviet news agency Tass on August 30, 1963, stated that the recent underground test in Nevada violated the 'spirit of the treaty." The Communists are quite aware of the esteem in which any treaty is held by the people of the United States. They understand that our respect for the law is such that we will live up not only to the words of a binding treaty, but will lean over backward in order to avoid violating even the spirit of a binding treaty. They understand the American penchant for thinking along legalistic lines and remember how much faith we placed in the Kellogg-Briand treaty for the renunciation of war. To the Soviets a disarmament treaty is a paper bullet. a technique of psychopolitical struggle. As President Kennedy has aptly said, the Soviet idea of diplomacy is:

What's mine is mine, and what's yours is negotiable.

Several other ambiguities are sprinkled throughout passages of the treaty. Admiral Arleigh Burke, in his testimony, indicated that he is concerned lest the words "underwater, including territorial waters or high seas" might not be interpreted by the Soviets to include "internal waters." My own include "internal waters." My own includes internal waters. But there is room for debate, argument, question, and misunderstanding.

According to Admiral Burke:

Tests in internal waters, under the present wording of the treaty and under at least one therefore, permissible if radioactive debris is not deposited outside national boundaries. otherwise, the treaty would need provisions for inspection to detect against inland underwater testing. And if testing underwater in an inland lake is permissible, in what other waters might it also be permissible?

Admiral Burke, on page 13 of his prepared statement, also raised a question concerning the interpretation of "terri-torial waters" as alluded to in the treaty:

We have a meaning for "territorial waters," but it is doubtful that the Soviets would entertain the same meaning. In fact, a representative sampling of the writ-ings of international lawyers would give evidence to the fact that they either re-frain from using the term or disagree to its meaning when they do use it. We would probably agree with the definition that ter-ritorial waters are those included within a definite maritime zone or belt adjacent to a State's territory. The Soviets would also use this definition if it were clearly suitable to their purposes, regardless of their present intentions.

But since the term is ambiguous, any party is free to adopt his own definition. There obviously cannot be, in the present case, a mutually agreed definition of the term "territorial waters," since we have been assured that this treaty constitutes the entire agreement.

Other important areas of misinterpretation are clearly in evidence as was manifested during the entire course of the hearings. Careful reading of the hearings will reveal that many Senators were not satisfied that the United States may be permitted to use nuclear weapons in war.

Even former President Eisenhower was not satisfied with the terminology of the treaty on this point.

Mr. President, my concern is that the United States will be overly cautious in its interpretation of the treaty. In actual practice, therefore, our progress under the treaty will be inhibited by the fear that we will be charged with a violation thereof, whereas the Soviets, on the other hand, will not suffer from such inhibitions. As a matter of fact, the very nature of a closed society, such as theirs, will encourage them to undertake violations of the treaty in the expectation that those violations cannot be detected, identified, and verified. Our past behavior reveals precedents of the exercise of excessive caution in interpreting agreements. As a matter of fact, we used excessive caution in observing the voluntary moratorium during the years 1958-61. That agreement was not even a treaty. In order to avoid alarming the Fussians however we refreized from

in the fall of 1961 caught us only weakly prepared. 2. THERE IS DANGER OF CLANDESTINE TESTING BY THE SOVIETS

making adequate preparations for the

resumption of nuclear testing. As a re-

sult, the Russian atmospheric explosions

Russians,

however, we refrained from

Many who speak for the treaty do not deny that there are real risks of clandestine testing, but they find reasons to

discount every risk, or to resolve every doubt in favor of the treaty. Secretary McNamara, for example, stated:

While tests at extreme ranges are a technological possibility, they would involve years of preparation plus several months to a year of actual execution, and they could cost hundreds of millions of dollars per successful experiment.

Are we not forgetting the patience of the Communists, their skill in space, and their willingness to put as much of their resources as necessary into their efforts to achieve military supremacy over the United States?

Secretary McNamara then pointed out two more possible loopholes for cheating. He said:

Over the U.S.S.R. or Communist China, only very low-yield tests, with quite limited objectives, could have a good chance of escaping discovery. These tests could not produce significant advantages.

In certain remote parts of the world such as the South Pacific the threshold of evasion of geophysical detectors in the upper atmos-phere will be somewhat higher and the chance of recovering a debris sample might be rather small. However, it is most unlikely that the Soviets will try to take advantage of this situation. An upper atmosphere test would be difficult to perform from shipboard and might require several vessels properly deployed around the test point. Preparations for such a test would be relatively easy to discover.

In other words, this treaty has known loopholes; but explanations, some of which are admittedly plausible, as to why the Soviets will not employ them, may be advanced. I think we are underrating Soviet cunning and the Soviet determination to outwit us. On the other hand, I think we are overrating the Soviet fear of being caught in a vio-lation and the Soviet respect for world

The fact that the Soviets have no concern about the wrath of public opinion is amply demonstrated by the way they ended the moratorium on tests in the fall of 1961. The Soviets knew in advance that there would be loud protests throughout the world when they resumed testing after the moratorium which had lasted 34 months. Nevertheless, they did not hesitate to resume tests, because they knew it would catapult them ahead in their nuclear knowledge.

Even though the United Nations General Assembly passed, on October 27, 1961, by a vote of 87 to 11, with 1 abstention, a resolution appealing to the Soviet Union not to carry out its stated intention of exploding a 50-megaton bomb, 3 days later the Soviet Union detonated a bomb of 57 megatons, which the United States has not yet matched. World opinion, ergo, means nothing to the Soviet Union, except insofar as it may constitute a very useful tool against the United States.

As to our detection system, there is ample evidence that it leaves much to be desired. Even if a very expensive detection system is employed, we can have no assurance that the Russians will not devise a way to successfully shield tests from currently known detection methods. The entire question of outer space testing and detection is in the

stage of infancy, and it is impossible to predict how it will develop.

As shown on page 106 of the test ban treaty hearings, Secretary McNamara

Over the U.S.S.R. or Communist China, only very low-yield tests with quite limited objectives could have a good chance of escaping discovery. These tests, we believe, could not produce significant advantages.

And on page 109, we find that Secretary McNamara said:

I do not pretend that this or any other agreement between great, contending powers can be risk free. Surely this one is not. I cannot guarantee that we will detect any single clandestine test the Soviets might attempt; but Soviet technical and military advisers cannot guarantee that we will not. I am convinced that even undetected clan-destine tests will not alter the basic military balance.

Supporting witnesses have indicated, therefore, that there is not 100 percent assurance that we will detect violations; but, they added, neither is there 100 percent assurance for the Russians that we will not detect violations. In other words, we are to accept the minimum standards of adequacy. In effect, we are told that, so long as there is not 100 percent assurance that an attempted test in space will go undetected, we are adequately safeguarded. I contend that when dealing with the Communists, we must apply the maximum standards, and must allow no loophole for evasion, for so long as there is a single loophole, the Communists will find it and will use it.

Secretary McNamara said—as shown on pages 140 and 141:

Secretary McNamara. I would be quite happy to go into it in length, but perhaps I can simply say now we have a very substantial capability through geophysical and other means of detecting nuclear explosions in the forbidden environments.

I don't believe that we can say that the present capability will give assurance of detecting all such explosions or of identifying all such explosions.

We, therefore, are considering augmenting the present capability. Even after that augmentation is made, if it is made, I don't believe that we can guarantee that we will be able to identify all possible violations of the treaty, but I do strongly believe that the vio-lations that may not be identified by the present or augmented system will not shift the military balance of power.

So, in essence, we are told not to worry about violations which may go undetected, because they will not significantly alter the balance of military power.

As shown on page 673 of the test ban treaty hearings, Admiral Strauss made this statement with reference to the significance of even one test:

A radical new weapon discovery or a breakthrough in countermeasure systems, suddenly tested and found workable, could put the possessor nation in command of world events.

We ourselves were twice in that position, first with our invention of the fission bomb and later of the fusion bomb. Of course, we never considered making such use of our advantage, but what if in the future the situation is reversed, as well it may be?

For instance, it has been said that the Soviets might elect cheating with a single test which might even escape detection; that we could surely detect a series of tests but that one test by itself alone would be of little

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significance. This unfortunately will not stand up in the light of history.

We cannot forget, we should not forget, that only one single test proved the atomic bomb, and one test proved the principle of the H-bomb. If such radical invention is made on our side of the Iron Curtain, one that is provable only by testing it above ground, the treaty will firmly bind our hands.

Thus paralyzed, we can only file the idea away in a safe and pray fervently that the same invention will not occur to scientists on the other side of the Iron Curtain. Unfortunately, there is a well-recognized and frequently experienced phenomenon known as simultaneous invention. It may operate against us.

If the discovery—the breakthrough—is made on the other side of the Iron Curtain, is there anything upon which to base an estimate of the situation? Would the Soviets, in that circumstance, or other circumstances favorable to them, clandestinely breach the

On page 186 of the hearings before the Committee on Foreign Relations, the Senator from Georgia [Mr. RUSSELL] made the following statement:

DETECTING TESTS AT DIFFERENT ALTITUDES

Senator Russell. Mr. Chairman, I only have one or two questions that I did not get to this morning. I hope they were not covered in my absence. If they were, Mr. Secretary, I hope you will tell me if the answers are in the record.

On page 19 of your statement, in dealing with the subject of atmospheric tests, you said: "In the upper atmosphere—say above e miles [to 20 miles] high—the principal purpose of clandestine tests would be for determining weapons effects."

Is there any difference in the ability to test in that area, from 6 to 20 miles, than on the surface of the earth, and still higher

in the atmosphere

Secretary McNamara. Yes, sir; there is a difference—not in the ability to test—because none of the parties are allowed to test there, but there is a difference in the ability to detect and identify clandestine tests. It is more difficult to detect and identify tests in certain bands of the atmosphere, particularly in this band I am discussingsay roughly from 6 to 20 miles, than it is to detect tests in the low atmosphere.

Senator Russell. Of course, tests below the 6 miles I suppose you can detect through debris rather easily. That is our principal method of detecting them.

Secretary McNamara. There are a series of methods used for that purpose. Perhaps Dr. Brown could speak to them very briefly. Senator Russell. Very well. Dr. Brown. The techniques that I think

are of most interest in this regard are the acoustical signal, the electromagnetic signal, which is like a lightning flash essentially, and the debris. All of them are applicable below 6 miles.

In the band from 6 to about 20 miles, the electromagnetic signal is suppressed the electromagnetic signal is suppressed somewhat, and therefore you do not have as many techniques, and therefore it is somewhat more difficult. Debris sampling is also harder to do, but it is not impossible. So that even for tests at, say, 10 or 15 miles. there is some chance of being able to detect debris. But it is a smaller chance. And that is why this region is of particular concern.

On page 274 of the hearings General Taylor referred to the risks and disadvantages in the treaty, and the fact that the disadvantages will be aggravated by illicit testing. He said:

Such disadvantage as might accrue to the United States under conditions of honest fulfillment of treaty conditions would be further aggravated if the Soviets successfully tested by illicit explosions in the atmosphere, underwater, or in outer space.

On page 282 of the hearings before the Committee on Foreign Relations, the Senator from Georgia [Mr. RUSSELL] asked the following question of General Taylor:

PRESENT DETECTION SYSTEM NOT ADEQUATE

Senator Russell. General, one of the very important elements involved in the art of detection by various methods of explosions. Are you satisfied with the devices that we have at the present time?

General TAYLOR. No, sir. As indicated among the four safeguards, one of the areas where the Joint Chiefs feel additional effort should be expended is in improving our detection devices, and a review of our program is being conducted at the present time.

On page 324 of the hearings before the Committee on Foreign Relations, the Senator from Ohio [Mr. Lausche] and General Taylor engaged in this colloquy:

RISK OF CLANDESTINE TESTING

Senator Lausche. You are also of the opinion that by clandestine tests, Russia could technologically aggravate these disadvantages under which we will be laboring in the event the treaty is adopted.

General TAYLOR. That is correct. would say they can do a certain amount of clandestine testing if they want to and if they are prudent enough to hold down the level, thereby they can make some gain-

On page 330 of the hearings conducted by the Senate Committee on Foreign Relations Senator Young asked a question of General Taylor regarding detection devices:

Senator Young. And do you feel, General, that 2 years from now or a year from now, our detection devices probably will be more accurate?

General TAYLOR. I am not an expert in the field. I doubt that we could do it quite that fast. But certainly in a few years we can do distinctly better.

On page 331 the following appears:

General TAYLOR. Well, I don't dispute the logic of what you say, Senator. I don't think we military individuals can afford to assume anything other than the worst in this particular field, and we did take our position on the treaty with the assumption that the Soviets would attempt clandestine testing of some sort.

The CHAIRMAN. Do you mean very minor, small tests which would be difficult to detect?

General Taylor. Yes, sir. I would think the temptations would be in the atmospheric tests of small weapons, small tactical weapons, for example, or small tests which could be extrapolated to apply to the antimissile missiles. That would be the tempting area.

The CHAIRMAN. So small it would be very difficult to detect. Is that what you mean? General TAYLOR. That is right.

The CHAIRMAN. But it is in this field that you feel we are very well prepared ourselves, is it not?

General TAYLOR. Well, it is in this field where I don't think the gains that might come from this kind of testing would have any great bearing upon our relative posi-

On page 395 of the hearings before the Committee on Foreign Relations, the Senator from California [Mr. Kuchel] asked the following question of General LeMay:

EFFECTIVENESS OF DETECTION METHODS

Senator Kuchel. General, just in lay terms, is our detection system with respect

to atmospheric nuclear explosions sufficiently efficient so that we would know if there were an attempted clandestine breach by the Soviet Union?

General LEMAY. The answer to that has to be "No," because I don't think we can detect every explosion that they may attempt in the atmosphere any place in the world.

Now, we have some figures; I am sure you are familiar with them as well as I am, but we cannot guarantee to detect every explosion; no, sir.

On pages 418 and 419, Dr. Teller said the following:

Most of us believed and the U.S. intelligence firmly and unequivocally predicted, that the Russians will not have a nuclear explosion for many years.

The first Russian test in 1949 was a complete surprise. Some of us got worried. I got very worried about the next surprise that might be in store for us, and we started out on the next step which the majority of the scientists said could not be done, the thermonuclear explosion.

You know that within a short time that succeeded, with an effect almost a thousand times as great as the first explosion, and that, in turn, was followed within a few months with the Russians producing something that looked very much like a thermonuclear explosion.

Again, in contradiction to all expectations, to all predictions, to the explicit statements of the intelligence community.

On page 448 Dr. Teller, with reference to illegal and clandestine testing in space as not being a reasonable proposition for the Soviet Union, and as being something that we can protect ourselves against, said as follows:

Dr. Teller. I believe that this reflects the Secretary's great reliance on intelligence. hope he is right. I fear he may not be.

Senator Mundt, on page 241 of the hearings, asked questions of Dr. Seaborg concerning the detectability of an underwater test:

DETECTABILITY OF AN UNDERWATER TEST

Senator MUNDT. Let me ask you a specific question in this field of detection. Several people who have made a lifetime study of gopolitics are concerned about the fact that while underwater testing in the interior waters of Russia in a lake as vast as Lake Baikal-which is so deep that you could use it for submarines and so vast that it is virtually an interior ocean-is barred by the treaty. Do we presently have the means of detection so that we could find out if they violate the treaty in this area by underwater tests, 3,000 or 4,000 feet under the surface of the water, in Lake Baikal in the interior of Russia?

Dr. SEABORG. No. We don't have the means of detecting such a test by instrumentation, by the methods of detecting nuclear tests through physical means..

Senator MUNDT. Does this mean that we simply have to rely on the unsupported veracity and word of the Russians that they are fulfilling their treaty in this area. are told by Secretary Rusk that it is intended that the treaty prohibit underwater tests of that nature in Lake Baikal,

Dr. SEABORG. Well, I think that more important than that is that we don't see any great gain that they could make by making such a test or tests and that the hazards to the Soviets themselves are considerable in contaminating the inland waters, and so forth.

I think that I would be motivated more by that consideration, that it would be the sort of test that wouldn't bother me very much that there isn't a great deal that they could learn there that would be of concern to us so far as our national security is concerned. Senator Munor. The fact that underwater tests are prohibited by the treaty would im-

ply to me that they must have some value to somebody or they wouldn't be prohibited. Dr. Seaborg. Yes, they do, but the value is an order of magnitude less than the value, much, much less than the value of atmo-

spheric tests.

Senator Mundt. They do have some value. Dr. SEABORG. They have some value, yes, very specific value, though, namely, the effect of the nuclear explosion on a ship or a

I think it is apparent, Mr. President, that, although we hope for compliance, we cannot discount the probability that the Soviet Union will violate the treaty. The frustrating problem which will confront us, in this regard, will be that of detecting and verifying the violation.

3. THERE IS DANGER OF SURPRISE ABROGATION BY THE SOVIETS

The fact that the Soviets brazenly broke the moratorium in 1961 demonstrates more than the fact that they have no regard for public opinion. It also warns us of another method in addition to clandestine testing by which the Soviets can use this treaty to get ahead of us. I refer, as I have already indicated, to surprise abrogation. On August 30, 1961, while the United States was offering various concessions at the Geneva Conference to get the Soviet Union to agree to a ban on all nuclear tests, the Soviet Government simply issued a statement announcing that it was going to resume tests, and 2 days later. it conducted the first of a long, extremely well-planned, highly advantageous test series. This ended a 3-year uninspected moratorium which the United States had unwisely observed in the futile hope that it would encourage the Soviet Union to accept an adequate inspection system. Almost 8 months passed, following the Soviet abrogation, before the United States was able to resume atmospheric testing.

Just before the announcement that the United States would resume atmospheric tests, William C. Foster, Director of the U.S. Arms Control and Disarmament Agency, pointed out the tremendous advantages which were reaped by the Soviet Union in its surprise resumption of tests in 1961. He wrote in a letter to the editor of the Washington Post

on February 9, 1962:

While the details would not be appropriate in this letter, it has become clear only in the in this letter, it has become clear only in the last month that the Soviets achieved some substantial gains in their test series of last summer and fall. One more such advantage—that is, another long and intensive series, after a period of no testing on either side during which they extrapolated the reside during which they extrapolated the re-sults of these tests and, on that basis, secretly prepared for new tests—might actually give them a superiority in the anti-missile or other strategic areas which their military interests would find hard not to exploit.

This treaty lays the groundwork for the exact same thing to happen again. After the Soviet Union has analyzed all its data from past tests and laid careful plans for a new series, after our guard has been let down and our efforts have relaxed, after the American scientists have performed all the work they can in

the laboratories and through under-ground tests and have been stymied by the inability to conduct further tests, the Soviets will simply 1 day resume testing, leaving the United States far behind. It would not be out of character for them to ignore the 3-month withdrawal clause. because observance of the clause would give us an opportunity to prepare for a test resumption too.

The administration has contended that it will protect the Nation against the danger of surprise abrogation by keeping its scientists active in the laboratories and active in an underground testing program, and by maintaining a high state of readiness to conduct tests in the atmosphere at any time. I question whether we will be able to maintain such preparations indefinitely, no matter how good our intentions, especially after the treaty has gone on a few months or years and the Communists have succeeded in getting us to lower our guard.

Only a year and a half ago, on March 2, 1962, when President Kennedy announced that the United States also would resume atmospheric testing, he pointed out the difficulties of keeping scientists in a free society working on a test series which might never be conducted. He told a radio and television audience:

We know enough now about broken negotiations, secret preparations, and the advantages gained from a long test series never to offer again an uninspected moratorium. Some may urge us to try it again, keeping our preparations to test in a constant state of readiness. But in actual practice, particularly in a society of free choice, we cannot keep topflight scientists concentrating on the preparation of an experiment which may or may not take place on an uncertain date in the future. Nor can large technical laboratories be kept fully alert on a standby basis waiting for some other nation to break an agreement. This is not merely difficult or inconvenient—we have explored this alternative thoroughly and found it impossible of execution

Although the President was speaking of an uninspected moratorium on all tests, the same argument applies today to the uninspected treaty which awaits our decision, unless the American people are determined, and remain determined, not to relax in the effort to be prepared

for any eventuality.

We should also know by this time that an intelligence community which was unable to detect in time the conduct of preparations, by the Russians, during the moratorium, for a resumption of atmospheric testing, and which was unable to detect the shipment of offensive weapons to Cuba until virtually the last minute, cannot be depended upon to detect Soviet activities in anticipation of a planned abrogation of this treaty.

With reference to the possibility of planned abrogation, I refer to Dr. Seaborg's statement, as shown on page 208 of the test ban treaty hearings:

We must always remain alert to the fact that one side may try to acquire a superior advantage through violation or abrogation of the treaty. The effect of such an action on the other parties is decidedly less where underground testing is permitted and where an active program of worldwide nuclear test detection is continued.

It does not seem possible to be forewarned against a surprise abrogation. Even if the 3 months' notice period for any country planning to withdraw is given, it would possibly have been accompanied by an earlier period of preparation.

General Taylor, as shown on page 274 of the hearings, referred to the possibility of an abrupt abrogation:

The Joint Chiefs of Staff believe that the withdrawal provision requiring 90 days' notice following a unilateral U.S. decision provides a satisfactory means of escape in case we believe our national interest is being threatened. They are impressed, however, by the possibility of an abrupt abrogation by the Soviets, followed by a comprehensive series of atmospheric tests.

As appears on page 319, General Taylor further commented on the possibility of an abrupt abrogation by the Soviets:

I doubt we will ever be sure that we can detect the preparations and not be surprised. We can hedge our stake, so to speak, by improving our own reaction time. But beyond that I would say it is impossible in my judgment to upset the relative balance of power quickly, as a result of something of this

General LeMay, on page 375, said this: (The Russians) have already said they would abrogate the treaty if—at any time they thought it was necessary. And I firmly believe that they were conducting tests during the moratorium that we had. And I certainly have no faith that they will keep their word in this one if they feel it is to their advantage to do otherwise.

Secretary McNamara, on page 130, said this:

It has led to the conclusion I just gave that they will not adhere to any treaty when they think it is contrary to their interest to continue to adhere to it. It is for that reason, among others, that I believe we must be prepared for surprise abrogation of the treaty by the Soviets.

At page 140, Secretary McNamara referred again the likelihood of a Soviet abrogation:

First, I think we must be prepared for surprise abrogation by the Soviets. As I testified, I don't believe they will adhere to this treaty one moment longer than they think it is in their interest to adhere to it, and I can't predict how long that will be. So, we must be prepared for surprise abro-

Admiral Strauss, as appears on page 674 of the hearings, had this to say about the planned abrogation of the voluntary moratorium:

A distinguished scientist, who was a principal adviser to our negotiating team in Geneva, published an essay in August 1960. This is a quotation from it: "I had the doubtful honor of presenting the theory of the big hole to the Russians in Geneva in November 1959."

May I interrupt there to say that the reference to the big hole is a method for reduc-ing the seismic signal of an underground explosion by decoupling. I continue with

the balance of the quotation:

"I felt deeply embarrassed in so doing, because it implied that we considered the Russians capable of cheating on a massive scale. I think that they would have been quite justified if they had considered this an insult and had walked out of the negotiations in disgust.'

The Russian scientists for whose sensitivity our scientist had so admirable a regard were not so thin-skinned. At that very time

A BALLON DOWN

they must have been engaged in the massive preparations for cheating on a massive scale. In barely 12 months after the article appeared, they staged a series of tests which, for length, and number, and size of weapons, astonish the neutral and free world, and I might interpolate here parenthetically that we might not forget that the Soviets got not so much as a slap on the wrist from the congress of neutral nations in whose very faces, as it were, this series had been exploded.

This "contemptuous breach of faith," to use the President's appropriate adjective, seems already forgotten by many Americans. It took place 2 years ago, but we can shorten the focus in point of time.

On page 420 of the hearings, Dr. Edward Teller alluded to the surprise abrogation of the moratorium and to the test results which followed:

RUSSIAN TESTS RESUMED-1961

In the summer of 1961 the Russians resumed testing, in the late summer.

We know now that this test series was by far the most powerful, we have reason to believe that it was the most powerful in the whole history of Russian preparations, and it was the most plentiful, the most repetitious, the most solid ever carried out by any nation.

I don't think that any expert will disagree with me when I say that this test series had to be prepared for many months in advance, and that the preparations had to be expensive, widespread, and should have been open to intelligence information. It is possible, I would even say that it is probable that the planning of this abrogation took a time longer than a year.

time longer than a year.
Yet on the day before Khrushchev made his announcement our Government still did not know that a test series was impending.

Here is another surprise, another failure of us to predict what the future will bring and what the Russians intend to do.

RUSSIAN ADVANCES-RESULT OF TESTING

As a result of this test series the Russians made a big explosion. For one I can tell you this was no surprise. I wish I could talk about it more. It is interesting, it is slightly relevant, it is classified, but the Russians did have a surprise in store for us, and that surprise was their announcement and evidence supporting that announcement that they did make great strides toward missile defense.

In 1961, and in the similarly impressive test series in 1962, the Russians had every chance in the world to make the observations in the atmosphere which are the firm basis of any plan for an effective or halfway effective missile defense, and I am saying halfway effective in the most serious way.

As to the amount of time that would be lost, in the event of a surprise abrogation by the Soviets, before we could proceed with atmospheric testing, Secretary McNamara elucidates, on page 157 of the test ban treaty hearings, as follows:

Secretary McNamara. I will give you some rough approximations. I think they are sufficiently accurate to answer your questions.

- I think we could test within approximately, or could carry out within approximately 2 months, proof tests. By proof tests, I mean tests of previously developed weapons
- I think we could test within approximately 1 month thereafter—that is, a total of 30 days—technical developments. I think we could carry out within approximately 3 months thereafter—that is, a total of 6 months, could carry out within that, extensive effects tests.

Now, this latter answer applies from a period 12 months from now and thereafter—this because whether we have a test ban

treaty or don't have a test ban treaty, an extensive period of time is required to prepare for complex effects tests.

Mr. President, if past actions of the Russians have any meaning whatsoever, this treaty is made to be breached, and I believe that it will be breached. There should be no doubt that its abrogation, which even the proponents generally anticipate, will be to our disadvantage militarily and possibly, politically.

4. THE TREATY WILL RESULT IN EUPHORIA IN THE WEST

Mr. President, with reference to my fourth point, that the treaty will result in euphoria in the West, may I say that the danger of euphoria has been alluded to by both friend and foe of the treaty. Secretary of Defense McNamara stated this fear as follows:

Perhaps the most serious risk of this treaty is the risk of euphoria. We must guard against a condition of mind which allows us to become lax in our defenses.

The Joint Chiefs of Staff, in their position paper, presented during the hearings, echoed this fear:

The most serious reservations of the Joint Chiefs of Staff with regard to the treaty are more directly linked with the fear of a euphoria in the West which will eventually reduce our vigilance and the willingness of our country and of our allies to expand continued effort on our collective security. If we ratify this treaty, we must conduct a vigorous underground testing program and be ready on short notice to resume atmospheric testing. We should strengthen our detection capabilities and maintain modern nuclear laboratory facilities and programs. Finally, we must not for a moment forget that mill-tant communism remains committed to the destruction of our society.

Adm. George W. Anderson, U.S. Navy, retired, referred to "a public opinion which must not for any reason be lulled into an attitude of false security or complacency."

All scientific and military personnel, whether proponents of opponents of the treaty, urged that every precaution be taken to carry out underground testing aggressively, maintain the necessary capability of our laboratories, and sustain a high state of readiness to resume atmospheric testing in the event of aborgation, all of which precautions may be victimized if our people become complacent and let down their guard.

Dr. John S. Foster, Jr., said:

People and skills cannot be stored for future use. In science just as in other specialties one must practice continually to be effective. Ultimately the present generation of weapons technologists must be replaced by younger scientists who, through experiments and theoretical studies, will also develop the required skills * * *. Without atmospheric tests, however, I doubt that we can develop and maintain the requisite skill in the important area of the effects of nuclear weapons. Even our theoretical effort in this area is likely to deterioriate without the incentive of meaningful experiments.

Secretary Rusk, as shown on page 30 of the test ban treaty hearings, referred to his fear of euphoria in this manner:

Quite frankly we here are concerned, we and the free world are concerned, that this treaty not itself lead to the kind of euphoria we cannot afford in the present situation.

Secretary McNamara, on page 109 of the hearings, displayed a similar concern regarding euphoria:

Perhaps the most serious risk of this treaty is the risk of euphoria. We must guard against a condition of mind which allows us to become lax in our defenses. This agreement is a product of Western strength—of the military buildup which I described to you earlier. Further progress in arms control arrangements with the Soviet Union—progress which we all want to make—depends critically on the maintenance of that strength.

Then, as appears on page 124, Secretary McNamara reiterated his concern:

I want to mention again, however, the point I raised in the latter part of my statement when I emphasized the danger of relaxation of our security measures, the danger of euphoria, the danger that could easily lead to a reduction in military budget, and a reduction in our military strength actions which I think at this time are quite undesirable.

Dr. Seaborg added his comment, as appears on page 208 of the hearings:

Public recognition of the need for strong laboratories and of the contributions made by the scientists is necessary.

At page 273, General Taylor's warning regarding euphoria was voiced by him as follows:

Finally, they believed that account must be taken of the dangers of any relaxed military effort by the United States and our allies; hence, that ratification of the treaty should be accompanied by evidence of a clear intent to maintain and improve the military posture of the West.

At page 275, General Taylor elaborated further regarding euphoria:

The most serious reservations of the Joint Chiefs of Staff with regard to the treaty are more directly linked with the fear of a euphoria in the West which will eventually reduce our vigilance and the willingness of our country and of our allies to expand continued effort on our collective security.

General Taylor, at page 276 of the hearings, continued, with reference to euphoria:

I think it may be a serious problem, Mr. Chairman. Certainly I am encouraged by the statement of the leaders of our Government at this time as to their determination to effect the safeguards that have been mentioned in my statement. As the years go by, however, I think we may lose sight of the fact that the Communist bloc has not changed its overall objective.

General LeMay, at page 379, referring to euphoria said:

Well, we feel if we follow these courses that we recommend that we can reduce the risk to an acceptable proportion.

But I am frank to admit that I do worry, considering my experience in this field, that we may get complacent and drop our safe-guards programs down to a level that I would consider insufficient.

At page 403, General LeMay said:

Well, certainly this isn't beyond the realm of possibility.

He was refering to euphoria.

I think it is probably well known by Khrushchev as well as all the rest of us that we have a tendency to become complacent from time to time. And let down our guard. We have done that many times in the past. Whereas they—

The Russians—

Whereas they can control things like that [deleted].

This could be a deliberately planned program in that regard, to get us to drop our guard down and this is one of the things that the Chiefs have worried about, that we will get such a treaty and then become complacent about it and not maintain the necessary safeguards.

Mr. President, the candidly expressed fears of the witnesses whose statements I have just quoted may materialize, to our country's disadvantage, in the course of future events.

Eternal vigilance on the part of the Congress, the executive branch, and the people will indeed be the price if we are to retain our cherished liberty. The same vigilance will be required by the other Western Powers, because, if we ratify this treaty, there is cause to fear that the underlying sense of urgency which led to the creation of NATO and which sustains NATO today may suffer a gradual erosion which will lead to the final collapse of Western unity and the Western will to resist.

Of course, the Soviets may, for reasons unknown to us at the moment, live up to the provisions of this treaty, at least for awhile, just as they faithfully observed their nonaggression pacts with Latvia, Lithuania, and Estonia for awhile before committing acts of aggression against those countries. But we shall have to be all the more on our guard, lest we be enticed, by virtue of their doing so, to begin the descent into the maelstrom of, in effect, unilateral disarmament.

5. MILITARY SUPERIORITY WILL SHIFT TO THE SOVIETS

It is not a groundless fear that the treaty constitutes a risk to the continued military superiority of the United States. The following reasons are stated to substantiate this apprehension:

First. The United States will be unable to overcome Russia's lead in high-yield weapons.

Second. The door would be closed to a further identification of problems of which we may be entirely unaware at this time.

Third. We would be unable to proof test our weapons systems.

Fourth. We would be prohibited from acquiring information concerning weapons effects upon weapons systems.

A. THE UNITED STATES WILL BE UNABLE TO OVERCOME BUSSIA'S LEAD IN HIGH-YIELD WEAFONS

We have been told by expert witnesses during the hearings that the U.S. weapons laboratories are capable of developing and stockpiling weapons with yields greater than 50 megatons without further atmospheric experimentation. It goes without saying, however, that we would not be able to test such weapons, and "their weight and size would be incompatible with any existing or programed missile delivery vehicle." I think that military opinion, generally, in this country has heretofore ruled out the necessity of a weapon of this size. It is worth noting, however, that unanimity does not exist on this matter, and that it is undergoing a reevaluation.

Gen. Curtis LeMay, on page 350 of the hearings, answered the question as to whether he sees any military need for a 50- or 75-megaton bomb:

Yes, sir; I do. The Joint Chiefs have already recommended we go ahead with the development work on a large-yield bomb.

General LeMay was then asked the question: Is this a new policy?

He answered by saying:

It is not new as far as I am concerned. I asked for, the Air Force asked for, a high-yield bomb as early as 1954.

General LeMay then went on to indicate that his reference to "a high-yield bomb" meant "over 50 megatons."

General Power, commander of the Strategic Air Command, expressed a similar need for a big bomb:

In the field of high yield weaponry, I feel that the Soviet Union now has a technical lead as a result of their tests in 1961 and 1962. They have a lead in their weight-to-yield ratio in the big bomb categories, and I feel that we should overcome that lead. You can only do this through testing in the atmosphere in my opinion.

However, again as we discussed earlier, if we are going to build such a weapon and put it in our arsenal, I would like to test it. I would like to know that I can depend on it from an actual test rather than on the basis of a theory or an extrapolation. I think the stakes are much too serious to deal with theoretical information. I think what we need are cold hard facts.

In answer to a question as to whether or not, as time goes on, the requirement for high-yield weapons goes up, General Power replied thusly:

It could. One of the things about strategic war planning is that you have to have flexibility. You cannot predict what something is going to be 4 or 5 years from now. You must be able to react to any situation. You must have the full spectrum of tactics covered and the full spectrum of weapons because ours is the role of retaliation, the most difficult role.

General Power, therefore, indicated the necessity of our having a flexibility of choice so that we might be prepared to deal with all foreseeable moves that an enemy nation might make.

B. THE DOOR WOULD BE CLOSED TO A FURTHER IDENTIFICATION OF PROBLEMS OF WHICH WE MAY BE ENTIRELY UNAWARE AT THIS TIME

Aside from the problems which we see inherent in this test ban, there are undoubtedly problems which will not come to our attention except through atmospheric testing. The Russians, in their very comprehensive atmospheric tests following the moratorium, may have identified such problems and may have acquired information, which we do not possess, leading to the solution of those problems, all of which could enable them to make a vital breakthrough in nuclear technology that would wrest superiority from us. Dr. John S. Foster, Jr., touched upon this during his testimony:

In being specific we can deal only with those problems which have already been identified. Of equal concern to me in the long run are those problems which have not yet been identified and that will surely arise in the future. The way in which the test ban would affect our relative ability to solve these future problems is impossible to anticipate. The best we can do is to extrapo-

late on the basis of our experience, to examine what we have felt was essential in the past. * * * Moreover, we have to reckon with the fact that in an expanding technology, vigorously pursued, there frequently result abrupt increases in scientific knowledge—rapidly reflected in military capability—which could upset the balance of power. * * The proposed treaty would limit not only our knowledge of the actual state of Soviet military development, but would also restrict our knowledge of what may even be technically possible. Specifically, this requires that the United States explore vigorously all areas of technology critical to our security. Failure to do this would add to the uncertainties concerning our relative strength, and force us to choose between either an increase in risk to our security or a further increase in our level of armament.

General Power, in referring to Russia's comprehensive test program following the moratorium, had this to say:

And it was a very comprehensive test program. The magnitude of it showed their interest in these weapons.

To me that was very significant, not the fact they had tests but the magnitude of these tests. It didn't indicate that this was information in which they were only slightly interested.

They must have attached vital importance to it in order to have a test program of this magnitude.

In answer to a question as to whether the United States accomplished as much "in proportion" during our atmospheric tests as did the Russians in the course of their tests following the moratorium, General Power answered in this manner:

No, I don't agreed with that statement. We discovered things, but one of the most important things I think we discovered is the great void in our knowledge.

Admiral Anderson expressed the same fear in this way:

I think that it is also prudent to caution that we do not know the precise extent to which the U.S.S.R. can advance in nuclear technology and in augmenting its overall nuclear capability as a result of the most recent series of tests conducted by them. * * Further, with respect to the military aspects, I would caution against any suggestion that nuclear technology will remain static; that prevailing offensive or defensive balance of forces cannot change; or that nuclear parity with the U.S.S.R. could be acceptable in the security interests of the United States.

C. WE WOULD BE UNABLE TO PROOF-TEST OUR WEAPONS SYSTEMS

Grave fears were expressed during the hearings with reference to our inability, under the treaty, to proof-test our nuclear weapons. Dr. Foster's statement is an illustration:

Perhaps the starkest of these other worries is that we will not be able to proof-test
our weapons systems. Missile systems for
offense or defense are extremely complex,
yet must function not only under the ideal
laboratory conditions in which they are usually tested, but also under the most adverse
conditions—those of nuclear war. I know
of simpler systems which have not performed as expected—or which have actually
falled—when proof-tested in environments
which are far better understood than that
of a hostile nuclear situation. Technical
people have had this experience not once but
many times. That the exact nuclear environment for missiles, missile sites, and re-

entry vehicles probably cannot be completely duplicated even without treaty restrictions is not an argument for no atmospheric tests whatever. We can obtain a much better understanding of the situation with nuclear experiments in the atmosphere than without

Admiral Strauss, at page 672 of the test ban treaty hearings, expressed the need for testing in this way:

TESTING FOR COMPATIBILITY OF WARHEADS TO SYSTEMS

There are, as you know, other purposes in testing besides the specialization and the improvement of weapons. We test to be sure that the weapon and its carrier-originally only the manned bomber and now also the missile—will function toegther as a dependable system. Even if weapon development should be frozen in its present state, there is no warranty for assuming that the carrier of the weapon may not be, and most probably will be, as revolutionary in the future as the guided missile and the Polaris submarine are today by comparison with the state of military art only 10 short years ago when neither of these existed.

When these new devices are invented, they can only be dependably mated to the weapon by testing. Their theoretical compatibility with the weapon will be too uncertain to rely

General Power alluded again and again to the necessity of proof testing our weapons:

I have some * * * different types of nuclear weapons in the Strategic Air Command arsenal. None of them have been tested operationally from stockpile to detonation. think this is a mistake. I think they should be tested.

The only way you can prove a weapon system is to take it out of the stockpile in a random pattern and let the tactical unit take it out and detonate it. If you haven't done this, there is always a chance that something has happened that we won't discover until too late. * * * The point I am making is that, unless you test the very thing that is in your arsenal, you are never certain, and the stakes are so high I feel we must be certain.

We have not tested any of the operational That includes warheads in our inventory. the missiles and the bombs.

A certain amount of information can be A certain amount of information can be arrived at in underground testing. * * But you never know until you actually test in the environment full scale whether or not you have solved the problem. Maybe you have oversolved it and pay too heavy a penalty. The sensible way to do it is to test the the nuclear environment. it in the nuclear environment.

But with the RV coming back into the atmosphere, it depends whether you attack it outside of the atmosphere, you have a it outside or the atmosphere, you have a different heating problem. As soon as the RV enters the atmosphere, it is being subjected to additional terrific heat. Now if you add pressure under those conditions, what happens? And the only way you can really test it is in the real environment.

General Power further referred to testing as necessary "in order to get a higher confidence factor that you have a valid war plan for one thing, and that you have a credible military capability, and that you can react under all of the various conditions that you are faced with in retaliation, and not only that, but also that you can coffvince any potential aggressors that you have all this. So it must be a proven capability. You

can see the danger when you are speculating on a quality. You might think you have it. He might think you don't have it."

Now we are talking about deterrence, and in deterrence it is not so much what we think of our capability. The important thing is what does the Soviet Union think of our capability, and that is an unknown.

D. WE WOULD BE PROHIBITED FROM ACQUIRING INFORMATION CONCERNING WEAPONS EFFECTS UPON WEAPONS SYSTEMS

Mr. President, the fact that this Nation has had military superiority has prevented the Soviet Union from overrunning the countries of Eastern Europe, the Middle East, and Africa, and has resulted in a world free from nuclear war-Our military superiority has underwritten and assured our own national security. I think the reason we have not had war with the Soviet Union is remarkably simple: we have had overwhelming superiority. And if any idea of attacking this Nation has been considered by anyone, the idea had to be rejected because of its ridiculousness. I believe that this is a sound position which we should continue to maintain, because I believe that our way of life is worth it and that our economy will sustain it.

Recently, we have been switching the emphasis, as far as our striking power is concerned, from the manned bomber to the ballistic missile. This means that our deterrent posture is going to rely more and more upon our missile system.

As stated by General Power, "In 1959 we had better than 2,000 bombers in the Strategic Air Command, and 10 years later, in 1968, we will have some 700," according to present programs. In the meantime, we will have added greatly to our ballistic missile complex. In other words, we are phasing out our manned bomber program and are replacing it with missile delivery systems. This means, then, that our missile system will become, more and more, the security lifeline of this Nation and the free world. It follows, therefore, that nothing must be allowed to eventuate which would neutralize the effectiveness of our missile delivery systems or permit the enemy to better penetrate our own defenses. Such an event would shift military superiority to the Soviet Union, and with it would go the deterrent which has heretofore guaranteed the security of America and the free world against attack.

It is my fear that the proposed treaty, if ratified—as I am sure it will bewill be the instrument through which and by virtue of which such an event will materialize. Why do I say this?

At the advent of the voluntary moratorium in 1958, this country had unquestioned superiority in nuclear weapons technology. Because the United States faithfully observed the moratorium, we conducted no atmospheric tests between October 30, 1958, and April 25, 1962—a period of 31/2 years. The Soviet Union broke the moratorium by resuming nuclear tests in the atmosphere on September 1, 1961, having announced its intention to resume such tests only 2 days before, on August 30.

The caliber of tests conducted by the Russians following the moratorium was such as to necessitate elaborate preparations extending over a long period of time prior to the resumption of the tests. Well-informed witnesses have testified that at least 11/2 years were required to propare for the high-altitude tests alone; and there are highly informed persons who estimate that the Soviets carried on their preparations, for the entire series of tests, from the very beginning of the 34-month moratorium. We, therefore, were not only unable to detect the activity, on the part of the Russians, in preparing for a resumption of the tests; but by our having observed the moratorium and, thereby, having failed to make preparations to resume nuclear tests, we were unable to conduct an atmospheric explosion of a nuclear device before April 25, 1962—almost 8 months after the Russians had resumed atmospheric testing. Our preparation for a resumption of atmospheric tests was therefore a hasty one; and our subsequent tests were not as comprehensive or successful as were those of the Russians. In other words, the Soviet Union, by deliberately planning to resume tests and by conducting preparations throughout the period of moratorium, as some think, was able not only to get the jump on us, by a period of 8 months, in the resumption of atmospheric tests, but also was able to conduct a much more elaborate, comprehensive, and productive series.

General LeMay, in referring to our possible loss of ground within the last 2 years, more specifically because of the preparations conducted by the Soviets during the voluntary moratorium and their planned and surprise abrogation of that moratorium, said—as shown on pages 363 and 364 of the hearings:

General LEMAY. We have already lost, I think, in some aspects, the lead that we had at the end of the war. We certainly had a tremendous lead then. We have lost that to some extent, because particularly in the last couple of years the Russians have conducted a very vigorous nuclear program. Ours has not been of that magnitude. So we, in effect, have allowed the Russians to catch up in some fields and perhaps even surpass us in some.

What we want to do is reverse this trend, at least to hold our own, and forge ahead if at all possible.

Senator Jackson. Is it not true that they made this big gain because they were able to use the element of surprise in abrogating without warning the moratorium?

General LEMAY. I think this is a fair statement, yes, sir; that during the moratorium we were not preparing an enormous test program. The Russians, I think, were. And when they suddenly abrogated the mora-torium and launched the test program they made very rapid progress.

On October 30, 1961, exactly 2 months after the Soviets had announced plans to resume nuclear testing, they detonated a 50-megaton to 60-megaton device. As late as August 5, 1962, the Soviet Union detonated in the atmosphere a nuclear device in the order of magnitude of 30 megatons. This was the first of some 40 tests continuing to December 25, 1962. The last atmospheric detonation by the United States was on November 4, 1962. Subsequent underground tests were, however, conducted

by the United States. As recently as June 30 of this year, the Atomic Energy Commission reported evidence of events in the Soviet Union in recent weeks which may be nuclear tests of very low yields. Incidentally, our inability to know with certainty whether these detected events arose from nuclear explosions is an example of the kind of uncertainties which may well face the decisionmaking elements of our Government under the proposed treaty.
On July 2, Mr. Khrushchev, in a speech

in East Berlin, agreed to negotiate on a nuclear test ban treaty limited to the atmosphere, outer space, and under-water. The commencement of negotiations on such a treaty began on July 15,

It is my fear, Mr. President, that the Soviet Union, during its elaborately planned, comprehensive postmoratorium tests, was able to acquire information concerning weapons effects which we have not been able to acquire because of our failure to explode a nuclear deof our faithful to explode a fluctear device in the order of magnitude of the Soviet nuclear explosions.

Mr. RUSSELL, Mr. President, will the Senator from West Virginia yield?

The PRESIDING OFFICER (Mr. SIMPSON in the chair). Does the Senator from West Virginia yield to the Senator for from West Virginia yield?

tor from West Virginia yield to the Senator from Georgia?

Mr. BYRD of West Virginia. I am

glad to yield.

Mr. RUSSELL. I do not like to interrupt the very able and well-documented discourse of the Senator from West Virginia. I regret that I have not been able to be in the Chamber during all the time he has been speaking; but I have heard as much of his speech as I

possibly could.

Does not the Senator believe that our obsession with our world image has something to do with the fact that we have fallen behind in some kinds of tests? As soon as other nations protest, we cut back the size of our tests, or abandon them altogether. We seem to believe that we cannot exist unless we strive ceaselessly, day and night, to create the proper kind of world image.

Of course we want people to like us. I wish all would admire us; I should like to see all the nations of the world emulate us; but I believe there is danger in carrying this policy too far.

Their world image has never disturbed the Russians. They were preparing to test for the high-yield warhead. As it turned out, I believe our scientists esti-mated that it was one of 60 megatons; but after it was actually tested, it was found that if it had had a different kind of jacket it would have been a 100-mega-

Even the United Nations overwhelm-

Even the United Nations overwhelmingly passed, as I recall, a resolutionalthough I do not recall the exact vote.

Mr. BYRD of West Virginia. It was passed by a vote of 87 to 11.

Mr. RUSSEIL. Yes, 87 to 11—or 8 to 1. The United Nations passed that resolution, but it had no more effect on Eussie's conducting of that lest than if Russia's conducting of that test than if some person confined to a mental institution had written a letter to Mr. Khru-

shchev. He did not pay the slightest particle of attention to the resolution; instead, he proceeded with the tests.

How has that hurt the Russians? Instead, when they do such things, they seem only to increase our desire to appease them, to accord them every consideration in connection with treaties, and to abandon elementary safeguards

for our Nation's security.

I have been disturbed about the overweening and compelling desire to yield almost everything to the world image. We hear about it here on the Senate floor. In the course of the speeches during this debate, very few Senators who have spoken in favor of approval of the treaty, have failed to state that a very poor impression of the United States would be created if we did not imme-diately advise and consent to ratification of the treaty. However, I believe that sometimes our willingness to lean over backward in our attempts to please everyone is mistaken for weakness.

If we would pursue a firmer policy, not only with respect to the Soviet Union and the Communist world in general, but also in protecting our interests throughout the entire world, I believe we would fare better than we do by sitting down, and holding our hands, or holding our heads, and being distressed almost to death about the kind of world image we are creating. It is a form of narcissism; we are so worried about looking "pretty" to the world that we abandon almost everything else, and give ourselves up to idolatry of the world image and to attempts to create the right kind of world image.

Of course, the world image has its place, and we must respect world opinion. So we try to make friends. Heaven knows that we have been generous enough in our efforts to make friends throughout the world. We have spent more than \$100,000 million; we have given it away here, there, and everywhere. On the other hand, the Russians, who have made a few loans and some minor grants, apparently have fared about as well as we have. Certainly they have fared as well by looking after their own self-interest, when they thought it was involved, as we have by abandoning our own self-interest, at times, when we thought we would thus create the proper world image.

Mr. BYRD of West Virginia. Mr. President, I thank the senior Senator from Georgia for his very pertinent statement concerning the anticipated effects which our rejection of the treaty would have upon world opinion, and also concerning the fact that this is a factor which evidently has carried great weight with many Senators in reaching their deciston to support the treaty.

The same factor of world opinion was reflected, I am sure, in the course of reaching decisions upon the treaty by members of the military.

Mr. RUSSELL. Our fear of world opinion has become almost a national disease.

Mr. BYRD of West Virginia. Yes. I shall refer to world opinion a little later in my statement. But I think it would be apropos of what the senior Senator from Georgia has said to refer, at this time, to a statement by General LeMay which appears on page 371 of the hearings of the Committee on Foreign Relations on the test ban treaty. General LeMay said:

General LEMAY. I think the fact that it had been signed had an effect on me, yes. In other words, both administrations in the years since the war have been trying to make some gains in the general disarmament field. This may be a gaiñ.

Consideration of world opinion must have had an effect upon General LeMay, or at least the fear of an adverse effect which rejection of the treaty would have upon other nations of our world and our relationship with those nations must have been a factor. It could not help but be a factor in General LeMay's thinking, in the thinking of others or, for that matter, in my own thinking.

Mr. LONG of Louisiana. Mr. President, will the Senator yield?

Mr. BYRD of West Virginia. I should like to continue briefly, and then I shall be happy to yield to the Senator from Louisiana.

On page 372 of the hearings, the Senator from Arizona [Mr. Goldwater] asked the following question:

Senator Goldwater. My question was at this point that if it had not been signed, if it had not been initialed, if we were merely sitting here discussing the desirability or lack of desirability of a limited treaty like this, would you oppose it or support it?

General LeMay. I had not given any thought to that patricular one. This is an important question. I would think that I would have been against it.

On page 373, the Senator from South Carolina and General LeMay engaged in the following colloquy:

POSITION IF TREATY WERE NOT YET SIGNED

Senator THURMOND, Senator GOLDWATER asked a question similar to one I propounded in the Preparedness Subcommittee. That is this: If the proposed treaty had not already been signed, but was being considered in a proposal stage, would you recommend that the United States sign the treaty?

General LEMAY. I haven't given thought to the subject, Senator. I said I would—I thought I would not be in favor of it. But I wouldn't even want to give an unqualified "No" until I spent some time on Certainly this was a factor that influenced me in recommending that we ratify it. How much weight I would give to it—I would want to spend a considerable amount of time on this, and I have not done so.

Senator Thurmond. I believe your answer in the subcommittee, and I quote, was this: "I think that if we were in a proposal stage that I would not recommend—that I would recommend against it.'

That is correct, is it not?

General LEMAY. I think I would. That is

On page 399, General LeMay said:

Well, I gave some weight to this psychological atmosphere that you were talking about, Senator, myself, in arriving at my conclusions. At this morning's session the other Chiefs said no, they didn't think it was very important. I do attach some impor-tance to it because for a number of years we have been trying to reduce tensions, reduce armaments in this country, both administra-tions have been trying to do that.

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This is a step in that direction, I believe, and if we did not ratify it I don't know what our political loss would be, but I think there would be political loss.

So I gave it some weight in arriving at my

On page 399 General Wheeler said:

I would agree that world opinion has built up to the point where there would be very sizable political implications if the United States were to dash these hopes. I am not prepared to say exactly what the effect of those political implications or the political effect would be, but I do not think it would be good.

Secretary of State Rusk, who supported the treaty, made a statement regarding world opinion which should guide us in our deliberations upon this treaty. I quote from page 55 of the hearings, where the following question by the Senator from Kansas [Mr. Carlson], will be found:

There could be, I am sure, no question as to the legal right to withdraw from a treaty, but I wonder if there is not another side to this. Once our signature is on this treaty, would it not be most difficult to withdraw from the treaty from the point of view of world opinion, even though there is positive evidence that the Soviet Union had violated it?

What will our position be with other nations in that event?

Secretary Rusk. So I think there would be very great regret if this treaty were to collapse.

But, on the other hand, where we are dealing with a security matter that goes to the life of our own country I do not believe that world opinion can play a decisive role. We must do what has to be done, and I believe that the rest of the world will understand.

I think that there would be general understanding, even if with great regret, there would be general understanding if we came to the conclusion that this treaty was not working and that our security required us to resume testing.

Of course, Secretary Rusk was talking about the possibility of our having to withdraw at some future time. It is easy to say now that in such a situation we could disregard world opinion. But we have not reached that bridge yet.

Mr. RUSSELL. Mr. President, will the Senator yield?

Mr. BYRD of West Virginia. I yield. Mr. RUSSELL. The Senator has certainly shown that he has done his homework. He has available a quotation of evidence for any question which might arise

At that period, when we first started the hearings, nearly all of our attention was centered on the effects the treaty would have on the United States of America and Soviet Russia. We did not go very far beyond that point. Some questions were asked as to Chinese testing and French testing. But we did not realize that we would wind up with more than 100 countries signatory to the treaty. That was one of the things that finally persuaded me that the treaty was not in the best interests of our Nation.

Amendments will be proposed to the treaty by countries which have nothing to lose. If they receive one-third of the votes, a conference will be called, and if there were a large majority of votes in favor of an amendment, it would be dif-

ficult for us to say that we would not support the particular amendment. That is as grave a danger to me as the implications of the treaty itself. Men of great ability, courage and intelligence have risen on the floor of the Senate and said—

We would shock the world if we did not sign the treaty. I myself have grave doubts and besetting fears about it. I fear it will endanger our country. But I shall support it because I do not wish to offend world opinion.

I must say that that argument almost persuaded me at the outset. I finally decided that nothing in human history would lead me to believe that any other country would sacrifice any of its vital interests on our behalf. So while I crave the good opinion of every people on earth, when it comes to a question of gaining world opinion at the expense of the vital interests of the United States, I must be counted out. I cannot go that far.

Much as I wish to be liked, and much as I wish to have my Nation admired, when it comes to a clash between world opinion and our vital interests, the world opinion will have to "go hang." I shall have to be counted out, for that will not enter into my calculations.

I do not believe any other country on earth has ever made the sacrifices which the United States has made since the end of World War II to build up a favorable world image. We have built up an image of people who will continue to tax themselves to take care of projects all over the earth. If the American people ever reach the point where they cannot maintain the tremendous foreign assistance program the image will be destroyed, and we shall have a bad world image, because next to a woman scorned "hell hath no fury" like that which results from taking away from a country some benefit which has been extended to it for a long period of years.

Mr. BYRD of West Virginia. Mr. President, I agree with the Senator from Georgia. It seems to me the sound position which has been expressed by the proponents of the treaty; namely, that if that moment ever comes when we must withdraw we should disregard world opinion in the interests of our own national security—should be applied here and now. I should like to apply that argument at this point.

The Senator from Georgia referred to world opinion. The Senator referred to the number of nations that have signed the nuclear test ban treaty. As of today, 97 nations have signed the nuclear test ban treaty. Since we are talking about world opinion, I should like to closely and meticulously scrutinize exactly what nations will constitute that world opinion insofar as signatures are concerned. I shall read the list of the nations:

The United States, the Union of Soviet Socialist Republics, the United Kingdom, Afghanistan, Algeria, Argentina, Australia, Austria, Belgium, Bolivia, Brazil, Bulgaria, Burma, Cameroon, Canada, Ceylon, Chad.

There are countries on this list I have never before heard of. There are countries listed which, I daresay, few Senators ever realized were in existence. Yet they are countries which are supposed to alter the course of world history.

Colombia, Chile, China—Taiwan—Congo, Léopoldville, Costa Rica, Cyprus, Czechoslovakia, Dahomey, Denmark, Dominican Republic, El Salvador, Ethiopia, Finland, Gabon.

I have no doubt that I shall mispronounce some of these names, because this is my first occasion ever to read them.

Mr. RUSSELL. Mr. President, if the Senator will permit me so to state, when I announced on the Senate floor my views with respect to this question, and incidentally stated that Gabon was the 91st state to sign the treaty, an eminent, able, well-educated and intelligent Senator asked me how to spell "Gabon."

Of course, Gabon will have the same right to propose an amendment to this treaty that the representative of the U.S. Government will have.

Mr. BYRD of West Virginia. Cer-

Mr. BYRD of West Virginia. Certainly.

German Democratic Republic—East Germany—Federal Republic of Germany—West Germany—Ghana, Greece, Honduras.

Mr. LONG of Louisiana Mr. President, will the Senator yield at that point?

Mr. BYRD of West Virginia. I yield to the Senator from Louisiana.

Mr. LONG of Louisiana. We are told in the committee report that the treaty will not forbid us from using atomic weapons to fulfill our treaty commitments in the event we must defend some nation.

Is it not true that any one of these little countries, some of which have hardly been heard of, would have the right to haul the United States before the World Court and have the World Court tell the United States that it is forbidden by the very clear language of the treaty to use its missiles or atomic weapons in the fulfillment of treaty commitments to defend some other country?

Mr. BYRD of West Virginia. I so in-

terpret the treaty.

Mr. LONG of Louisiana. The treaty reads that among its purposes is a purpose to prohibit pollution in the atmosphere. That would give every country an interest. No matter where an atomic plosion occurred, whether over our Nation's own territory, over the high seas, or in space, every country would have an interest and could haul the United States before the World Court. We are a member of the Court. We do have the Connally reservation.

A majority of Senators who expect to vote for the treaty have been trying to get rid of the Connally reservation.

In such an event we would have to stultify ourselves and say that the treaty was not an international question, which would provide for jurisdiction of the World Court.

It is clear to me that any one of the countries which accept the jurisdiction of the World Court would have the right to haul the United States before the World Court, which could tell the United States that the treaty means exactly what it says.

As the Senator well knows, General Eisenhower, a former President of the United States, said we would not wish to be held to a commitment that we could not use these weapons for our own defense purposes or to fulfill treaty commitments. The administration tells us the treaty does not mean that at all, and that they have no such thing in mind. There has been a legal opinion written by soem legal officer who was willing to put his name on it, which says the treaty does not mean that. But the Senator knows that the rule of statutory interpretation is that when the language is clear one does not look to legislative intent. Many people, who did not realize that if the language is clear the legislative intent is meaningless, have been put in jail.
Mr. BYRD of West Virginia. I thank

the Senator. I agree with him.

I continue to call the roll of the signatories: Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Ivory Coast, Jamaica, Japan, Jordan, Korea, Kuwait.

Laos, Lebanon, Liberia, Libya, Luxembourg, Malaya, Mali, Mauritania, Mexico, Mongolia, Morocco, Nepal, Netherlands, New Zealand, Nicaragua, Nigeria, Norway.

Pakistan, Paraguay, Peru, the Philippines, Poland, Romania, Rwanda, San Marino, Sierra Leone, Somali, Spain, Sudan, Sweden, Switzerland, Syrian

Arab Republic. Tanganyika, Thailand, Togo, Trinidad, and Tobago-there are two names, but one country-Tunisia, Turkey, only Uganda, United Arab Republic—Egypt— Upper Volta, Uruguay, Venezuela, West-ern Samoa, Yemen Arab Republic— Yemen—and Yugoslavia.

Mr. President, as has been stated, one

of the arguments persistently suggested in favor of the Senate's consenting to the ratification of this treaty revolves around the consequences to U.S. prestige and its image as the leader of the free world, and the adverse reaction which could be expected from world opinion if our con-

sent should be withheld.

Mr. LONG of Louisiana. Mr. President, will the Senator yield?

Mr. BYRD of West Virginia. I yield. Mr. LONG of Louisiana. Is it not true that a great many of those nations—particularly the smaller and less well-known nations—signed the treaty because the United States sent its Ambassador to the country and asked that it be signed?

In nearly all those countries—all except the ones behind the Iron Curtain, with possibly one or two exceptionsthere are U.S. aid programs in operation. My guess would be that the Ambassador merely walked in and asked them to sign. The people of those nations have no weapons; nevertheless, they would not be barred from testing atmoic explosions underground.
I suppose the American Ambassador

merely walked in and asked them to sign the treaty. They would sign, of course.

I have been informed that perhaps not more than seven countries have an atomic capacity, the ability to build an atomic weapon.

The American Ambassador would walk

ability to build a weapon, anyway, There would be a U.S. aid program in that nation. The Ambassador would say, "I would like to have you join in this treaty." And they would say, "We think that would be fine."

While I respect our President and feel very kindly toward him, and propose to help him in some of his legislative proposals, certainly with regard to this type of thing if the administration or the Government is worried about the embarrassment that may be caused, before we go that far out on a limb, it should withhold action until it ascertains whether the Senate is going to ratify the treaty.

Mr. RUSSELL. Mr. President, if the Senator will yield, the treaty is also important to certain ambassadors of most of those countries. It is a stimulation to their ego to sign the treaty. It puts them on a level with the "big boys." They can say, "Here we are all together. We are just as big as the U.S.S.R. and the United States and Great Britain or any other great nation, and we have the same right to offer amendments as anyone else; and while we have no nuclear weapons, if we can do anything to hamstring those who do have them and limit their use, it is in our interest, because 100 years from now we hope to be a mighty country. We may be able to dominate the earth, if we can stop those who have such weapons.'

I think we can judge states pretty well by reactions within the human family. Anyone who remembers when he was a little boy knows how little boys like to play with big boys. What a hard time the big boys have keeping the little boys from playing with them. This treaty gives the emerging nations great prestige. A foreign minister can say, "I was in the United States and sat down by the Secretary of the United States and, in behalf of our country"—perhaps with a few hundred thousand population-"I took the same position on the ban on nuclear weapons as did the United States and Soviet Russia. We are all equals in the community of nations spon-

soring the treaty."
Mr. THURMOND. Mr. President, will

the Senator yield?

Mr. BYRD of West Virginia. I yield to the Senator from South Carolina.

Mr. THURMOND. Does not the Senator from West Virginia think this was a move on the part of the administration, from the psychological standpoint, so it could be placed in the position of saying, "Look at all the nations which signed the treaty. If this country fails to ratify the treaty, that will give us a bad image around the world?" Does not the Senator think a psychological play was made on that point?

Mr. BYRD of West Virginia. I do not presume to read the minds of other peo-ple or to look into their hearts or to know whether or not this may have been the purpose and plan of the administration. I merely say that we are confronted with the situation, and I do not believe that we should be overly persuaded by it.

I join with the Senator from Georgia

favorable world opinion, and it is important that we project a favorable image before the world for ourselves; but I feel in a situation such as confronts Senators, they are voting on a question that is vital to the security of the United States of America, and Senators should subordinate the factor of world opinion, or our world image, to a secondary role in reaching a decision as to how to vote.

Mr. THURMOND. Does not the Senator feel that we would enhance our image if some of the very nations that seem offended by our action would not ask for foreign aid? I believe the record shows that we have provided foreign aid to 104 nations of the world, and this year there is a request to provide foreign aid to 100 foreign nations. The record shows that since World War II this country has provided \$121 billion, including interest, in foreign aid. Would it not seem more in order if there were not requests from these countries for large amounts of aid? Would it not be more in keeping if they would first provide for their own means, and not call upon this country for aid and then turn around and criticize this country for anything that happens here?

Mr. BYRD of West Virginia. Mr. President, I thank the Senator for his comments. I appreciate them. To some extent, I share those sentiments, but I do not believe that they are pertinent at this time, so I do not wish to proceed to discuss the matter of foreign aid. I do not mean to say that the subject of foreign aid is entirely dissociated from the subject which is now under dis-

cussion. I cannot see the close relevancy of it however.

Mr. THURMOND. Except in this respect: Nations over the world want foreign aid. The same nations have been asked to sign the treaty; and many of those nations are the very ones which have criticized the policy of this country.

Mr. BYRD of West Virginia. I do not think there is any question about it; and

I deplore the situation.

Mr. President, if we accept the argument concerning world opinion and if we agree that world reaction would be intolerable, the implications for future U.S. implementation of the withdrawal provisions of the treaty are ominous, as I have indicated.

But if we cannot refuse our consent now, before we are committed, how much more difficult will it be for us to withdraw, even with cause, after a few

months or years have passed?

I am convinced that we cannot have the best of both worlds. We cannot bow to world opinion now, and emphasize its significance, and still argue that our withdrawal from the treaty would be precise and simple and dictated solely by this Government's own judgment of its security requirements.

Mr. LONG of Louisiana. Mr. President, will the Senator yield?

Mr. BYRD of West Virginia. I yield to the Senator from Louisiana.

Mr. LONG of Louisiana. Is it not true that if this Nation is compelled to fight a war with the Soviet Union over the Cuban question, for example, it is en-The nation would not have an in saying it is important that we enjoy tirely possible that we shall not have a

single ally that will make a major contribution, one way or the other, to the outcome of the conflict? The Senator well realizes, I am sure, that if there is to be a nuclear war, most countries that do not have nuclear weapons will count themselves out in the beginning.

Mr. BYRD of West Virginia. I think they would like to count themselves out if they could by so doing extricate them-

selves from the situation.

Mr. LONG of Louisiana. Can the Senator suggest what possible difference it would make in a struggle of this nature whether the smaller nations joined or stayed out? Would not the outcome be determined one way or the other by the devastating power of the two great nuclear powers?

Mr. BYRD of West Virginia. I do not think there is any question about it. The United States possesses 90 percent of the striking power of the free world. That 90 percent of the striking power of the free world is built around the Polaris submarine and the Strategic Air Command. I think this fact supports what the Senator from Louisiana has just said.

Mr. LONG of Louisiana. The point that strikes the Senator from Louisiana is that if we should let the strength and defenses of this country decline, as compared with the Soviet Union's, to the point where we would not be able to save ourselves, we would be so foolish that we should not expect anybody to save us, because we have that power today, and we ought to see to it that it is maintained

Mr. BYRD of West Virginia. I agree.
Mr. President, we cannot argue that
this Government will be the unchallenged master of its fate in connection
with the withdrawal provisions of this
treaty, and the servant of world opinion
in connection with the treaty's ratification.

Our national security policies either are dictated by world opinion or they are not. If they are not, we can dismiss world opinion as a factor which looms large in our consideration of the treaty and confine ourselves to its security implications. If they are, we should recognize, then, that withdrawal will be complicated and difficult, and not the simple, straightforward announcement of decision and intent that the treaty and its advocates suggest.

I now return to my fifth point, the argument that we would be prohibited from acquiring information of weapons effects of tests.

General Power articulately voiced my fears before the Preparedness Subcommittee, when he said:

Now there are great voids in our knowledge on such things as (deleted) shock wave propagation, blackout, communications, and command and control that, in my opinion, can be obtained only through atmospheric testing.

If this information which we don't have should turn out to be valid information (deleted) I would say it is vital.

So, Mr. President, is there a possibility of unknown vulnerabilities in our intercontinental ballistic missile launch sites? Are our missiles truly survivable in a nuclear environment? Are our missile sites

vulnerable to overpressure, shock, and thermal effects which flow from the explosions of high-yield weapons?

I ask these further questions, Mr. President: Is it possible that the Soviets, in exploding multimegaton weapons, may be able to render our missiles useless through weapons effects upon the highly sophisticated electronic systems? Will our nuclear warheads and reentry vehicles have the ability to penetrate and survive in a nuclear environment created by Soviet defenses? Will our radars be ineffective in the presence of "blackout" from multimegaton bursts, thus making it impossible to locate the incoming warheads and perhaps more importantly to discern between the incoming warhead and the decoys?

While I do not doubt that our deterrent missile systems will be able to perform their mission today and tomorrow, because of their complexity there are unresolved uncertainties that we need to determine and to rectify so as to assure ourselves that our deterrent capability will be maintained in future years. These uncertainties can be more fully resolved only through a series of atmospheric nuclear tests. Could it be possible that the Russians, through their postmoratorium atmospheric tests, have acquired valid information which will guide them in determining and resolving such uncertainties as far as their own systems are concerned?

This is the question the answer to which we may learn when it is too late General Power referred to some voids in our knowledge:

This missile has never been operationally tested all the way through from stockpile to detonation, and we have never tested such things as the vulnerability [deleted] due to shock wave propagation, due to blackout, there are many voids in our knowledge as to the operational capabilities and vulnerabilities of this weapon system.

In particular the RV. [deleted] thermal effects, blast effects—cannot really be tested from my point of view as an operator until you test it in the nuclear environment, and as I am responsible for writing the war plans of the free world, I have to deal with facts.

I have to deal with proven data, and if too much of the data is extrapolated or theoretical, I do not have a high confidence factor that I have a sound plan. We are dealing with the security of the United States, and if facts can be obtained, I want to have them.

Now, in writing a war plan, I have to assign a survivability factor to every one of these silos. I have to assume that the Soviet Union has missiles with a certain accuracy and a certain yield and that they land in a certain place. Then I have to extrapolate whether that particular silo is going to survive and give it a value. I have to do that for each weapon system.

Dr. Edward Teller referred to the possible vulnerability of our weapons sites:

It is a fact fraught with danger that the ability of these sites to withstand the overpressures for which they have been designed has never been tested. ** * It is probable that under the test ban as proposed and interpreted at the present time these badly needed tests will not be carried out.

Dr. Foster spoke of the problem in this way:

Regarding defense, one of the critical questions concerns the effect of blackout

from defending missiles on the defense system itself.

Dr. Foster then went on to explore the problems which might confront our effort to penetrate Soviet defenses:

On the opposite side of the coin, suppose that the U.S.S.R. were to develop a defense such that our ability to penetrate might depend on a saturation attack. For this application, specially designed hardened warheads might be required. Considerable progress on such warheads can be made with underground tests, but under the treaty again the crucial atmospheric experiments to determine if the warhead actually has the necessary hardness against combined radiation and shock effects would be prohibited. We might thereby be denied assurance of such a penetration capability. The disadvantages resulting from the

The disadvantages resulting from the treaty in restricting our knowledge of site vulnerability, penetration and defense, I believe, are very serious. Our current judgments are based on relatively few atmospheric tests. Wide margins of error are possible in weapon effects which we do not fully understand. Other effects, heretofore neglected as unimportant, could become dominant. Ignorance, ineradicable under the treaty, can thereby increase the uncertainty in technical-military judgments.

Mr. LONG of Louisiana. Mr. President, will the Senator yield?

Mr. BYRD of West Virginia. I yield to the Senator from Louisiana.

Mr. LONG of Louisiana. I am sure the Senator is familiar with the fact that not only do we not know the information we should have if we are to be secure in our defense, and whether the hardened sites will withstand the shock and radiation of an enemy attack with atomic weapons; but, as the chairman of the Armed Services Committee pointed out in his speech, we do not know whether the overwhelming majority of the missiles we have in our inventory will actually work, because they have never been tested under the conditions under which they would be fired at a target.

I can illustrate that by the fact that in World War II the Japanese sank almost our entire Pacific Fleet, at least everything they could catch at Pearl Harbor, with torpedoes that we did not even know existed. They had tested their torpedoes against old ships, to make sure they would work.

On the other hand, during the first 18 months of World War II, time after time our submarine commanders would fire torpedoes at a Japanese ship, only to have the torpedoes bounce off the ship, or go under the ship in the case of magnetic torpedoes. The torpedoes would not explode, because we had never tested them under the actual circumstances in which they would be used. We had never determined whether they would work when they were fired. We had conwhen they were fired. We had con-tented ourselves with putting them through a test course. We thought that if all the components checked out, they would work. That is what we assumed. Of course it was a false assumption, and it almost lost us the war.
Mr. BYRD of West Virginia. I thank

Mr. BYRD of West Virginia. I thank the able Senator for his observation concerning the failure to test torpedoes during the early part of World War II. The Senator's comment is interesting and appropriate.

At page 182 of the hearings the Senator from Nevada [Mr. Cannon] asked a question with reference to weapons effects:

Senator Cannon. Now, do you feel that we have sufficient evidence and information available to us in the areas of guidance, from the standpoint of weapons effects?

Secretary McNamara. I believe we have sufficient information available to us in relation to the effect on guidance of nuclear explosions properly to protect our force and insure that will be effective against the enemy. I want to emphasize that we don't know all there is to know about the effects of nuclear detonations on guidance. Much of what we don't know can be learned from underground tests.

There is considerable difference of opinion, of course, as to how much can be learned from underground tests, but there is unanimity of opinion that everything we need to know concerning weapons effects cannot be learned from underground tests.

Mr. LONG of Louisiana. Mr. President, will the Senator yield?

Mr. BYRD of West Virginia. I yield. Mr. LONG of Louisiana. The Secretary's statement relies heavily upon the idea that we could test a warhead underground and find that it would explode; then test some other component and find that it would operate satisfactorily; which would lead to the conclusion that if the components were satisfactory when tested separately, and then were all assembled, desired results could be obtained.

What is wrong with that theory is that so often in actual operation the weapon will fail. That was what we learned about our torpedos in World War II. Theoretically they worked; in practice, they were not worth the powder it took to blow them up.

When a weapon is as complicated as a missile, which is infinitely more difficult to explode than it is to fire a torpedo, the only way to learn whether it will work is actually to try it under the kind of conditions in which it is designed to function.

Another example is the orbiting of men in space. Every time a man was put in space—it has been done about 10 times—something has gone wrong. The first time the shield was not ejected as it was supposed to eject. There was fear that the man would burn up as he came out of space. I believe it was John Glenn whose shield burned. When another man was orbited, something else happened. Improvisations were made to overcome mechanical failures.

Intercontinental ballistic missiles—the ones we are building at this moment—can get through to an enemy. But only one has been tested successfully, so far as I know, under combat fire, a test in which a missile was actually fired to see if it would get near the target and explode.

I believe there was a successful test of a Polaris missile. That would give us reason to believe that that type of missile will work, because it was fired under actual test conditions.

Incidentally, that would be an instance in which everything was checked out under conditions more favorable than

war conditions. But at least it would be a test to determine whether a weapon would actually work.

The Senator from West Virginia knows that many missiles in inventory have never been tried under similar conditions. As to those, the hope is that they would work, although we do not know whether they would or not.

Mr. BYRD of West Virginia. Exactly. General Power said there were x numbers of weapons in his arsenal, not one of which had been tested through the point of detonation.

Mr. LONG of Louisiana. Since our lives depend on the functioning of missiles, would not the Senator say it is rather dangerous to say that weapons which we rely on will work, not knowing whether they will work or not?

whether they will work or not?

Mr. BYRD of West Virginia. I certainly would say so.

At page 214 of the hearings before the Committee on Foreign Relations, Dr. Seaborg said, with respect to weapons

This is a weapons effect question for which the Department of Defense has primary responsibility. I can say that we have obtained a good deal of information on blackout phenomena in connection with our already performed high-altitude tests.

However, it would not be possible to obtain any substantial further information on blackout phenomena under the terms of this test ban treaty.

At page 245 of the hearings, Dr. Seaborg said, again with respect to the subject of weapon effects on our weapons system sites:

Because this is the total effect in the atmosphere I am referring to here on the integrated system, the whole system. We can carry out component studies, that is, the effect of the radiation from an ABM on a warhead, and things of that sort, underground. We can do that underground. But in order to study the effect of an ABM and its kill radiation on an incoming warhead, under the conditions that you would encounter in actual use, you have to do it in the atmosphere where the use would—in the environment where it would take place, and that is what I mean by that statement.

At page 274 of the hearings, General Taylor said:

There are other disadvantages which apply in varying degrees to both sides. For example, knowledge of weapons effects is in complete at best and although knowledge could be gained from underground testing, knowledge which only testing in the prohibited media could provide would be denied. Also, there would be no opportunity to conduct environmental tests of current weapons or of those which might be acquired in order to verify their performance.

General Taylor, referring to the subject of weapons effects, said, at page 286:

I am not a technical expert, Senator Sparkman, on this subject. Obviously, I have raised questions of a similar nature with the experts that we have. We know quite a bit about the general phenomenology of blackout effects from our own testing. I think that all of our experts would say, however, we certainly do not know everything, and we would like to know more.

General Taylor said further, at page 299:

General TAYLOR. As the Joint Chiefs have pointed out, there are limitations in the sense that we can never have complete weap-

ons effects tests which would involve atmospheric testing. That is a disability, but not a critical one. We can indeed develop, fabricate, and deploy an antiballistic missile system if we so choose.

Senator Humphrey. In other words, the scientific work relating to the vehicle that would be needed to mount a nuclear warhead or to send it into outer space or into the high altitude or into any kind of defense position is not impaired by this treaty, is it? General Taylor. No, sir. That can be done and tested. It is primarily the absence of a complete weapons test, including the nuclear warhead, which is being made impossible.

The point made by the Senator from Louisiana has been well substantiated by statements of our military experts. The fear that I have, and that certain other Senators have, is that while we do not possess more information—and it may be vital information—with respect to weapons effects on our weapons sites and systems, the Russians may already have acquired such information as a result of their extensive, elaborate, comprehensive, effective, and successful atmospheric tests that were conducted subsequent to their abrogation of the moratorium.

Mr. LONG of Louisiana. Is the Senator familiar with the statement of Dr. Brown to the effect that we could design around the areas of American ignorance? Can the Senator say what Dr. Brown meant by "designing around" our ignorance of the answers to these problems? How do we "design around"?

Mr. BYRD of West Virginia. I assume, with reference to a blackout of our radars, that he meant that we would provide more radars, and that they would be spaced in such a way that even though there might be a blackout here or a blackout there, the radars in some other area would function. That would be one way of "designing around."

Mr. LONG of Louisiana. If there were a large explosion in the vicinity of a city which was the target of one missile, I would then assume that "designing around" probably would mean that we would try to have a radar several hundred miles away, or might have some remote control procedure, in the hope of guiding a missile against a succeeding weapon aimed at the same city.

Not having had explained in detail what the problems are—and I am sure some of them are classified—it seems to me that the idea of "designing around" areas of American ignorance rather than finding answers to the problem would be in the same general category as trying to kill elephants with broomsticks, because one would be prohibited by a treaty from developing a good elephant gun.

Mr. BYRD of West Virginia. It would certainly be costly, time consuming, and uncertain. I assume that another way of "designing around" the weapons effects problem would be in connection with control systems related to missiles. Instead of ground control systems being used for our missiles, we could develop airborne control stations.

Another way of "designing around" some of the defects would be to attempt to harden missile sites to a greater degree than they have been hardened in the past.

I agree with the Senator from Louisiana that while we might be able to overdesign or overcompensate for some of the defects, we are not certain, in the first place, of precisely what the uncertainties are, and we will not be able to fully identify the uncertainties until we can test in the atmosphere.

Secondly, we cannot be sure that we have adequately compensated for the

defects.

Finally, it is important to remember that we are dealing with the security of the United States. When we deal with the security of the United States, we would like to deal with as few uncertainties as possible.

Mr. LONG of Louisiana. To say the least, if we should try to "design around" areas of ignorance, the weapons system adopted might be far less efficient than the one we would have if we actually had

the answer.

Mr. BYRD of West Virginia. Yes. I thank the Senator from Louisiana.

Continuing on the point of weapons effects tests, I should like to quote General LeMay, as his testimony appears on page 365 of the hearings:

General LEMAY. Well, from my personal standpoint, I haven't been too happy with our testing program in the past. I think we should have done more testing than we did, not only underground but in the atmosphere, too. I certainly haven't been happy with the situation which exists that we haven't been able to carry out full-scale tests on any of our missile systems.

Again I quote General LeMay, as his testimony appears on page 391 of the hearings:

General LEMAY. Well, if it would stay there, probably we wouldn't have much to

He was referring to the nuclear superiority we are supposed to possess.

Then he said:

But I wonder whether it is going to stay there or not, and, in addition to that, this is fust our estimate of the situation. Our delivery capabilities, I think at the present time are better than the Russians. That doesn't mean they are going to stay that

I think we have more weapons and a greater variety of weapons now than the Russians have. That doesn't mean it is going

to stay that way.

The thing that worries me is that this preserves the uncertainties that we have in our mind now for as long as the treaty is going to be in effect [deleted].

We just don't all know the things we would like to know about the vulnerabilities of [deleted] systems [deleted].

Senator Pastore. Can I interrupt you there, General? Do you think that the Russians know?

General LEMAY. They may know a great deal more about it than we do, as a result of the last two series of tests that they have run. [Deleted.]

General LeMay and the Senator from Rhode Island were referring to the possible vulnerabilities of missile systems.

General LeMay, continuing, said: This bothers me, and one of the things that I don't like that if this is true and they do know more than we do, they may know something that is vital. They may have been able to pick up a weakness in our defense system that they can exploit.

There is some reason for them wanting this treaty when they dign't want it on two occasions before. What is it?

General LeMay. These are the disadvantages that we see. They are possibilities and we certainly have tried to say that even with the safeguards that we have suggested that we have, that certainly ratifying the treaty is not without its risks.

Now, I pointed out these other uncertainties, that we don't know. For instance, [deleted | that the Russians are ahead of us in the high yield spectrum, we are about equal in the [deleted] megaton range, and we are

ahead in the lower [deleted] range.

Now, I can't prove otherwise, but I am
very suspicious, because we know [deleted] that the Russians were planning a test program [deleted] before they broke the moratorium and started testing. [Deleted.]

In addition to the uncertainties affecting our strategic missile system, expert testimony has indicated that atmospheric testing is mandatory for the development of an optimum anti-ballistic missile and for establishing with certainty its ability to perform its mission under the extreme conditions to which it will be exposed if the occasion to employ it should ever arise. There has been much confusion about the relationship between atmospheric testing and the perfection of ABM systems. This is not a matter involving the development and testing of the warhead. It does involve the question of whether we have adequate information on what we require in the way of a warhead and what we require in the way of radar performance to give this Nation an ABM system with sufficient reliability to make its production and development and deployment worth the billions of dollars involved. The technical testimony leaves no doubt that we can design and produce an ABM system of unknown performance and reliability under the conditions in which it must perform its mission. However, the degree of confidence we can place in such a system and the extent to which we can provide a system which will give this Nation the greatest protection at the lowest cost are directly dependent upon our ability to conduct the necessary tests in the atmosphere.

Mr. President, regarding the need for atmospheric tests in the development and deployment of an antiballistic missile system, I read a statement by Admiral Strauss, which appears on page 692 of the test ban treaty hearings:

With this reservation, I would like to comment, in order to protect myself from attack. I am no technician but I have been present at the birth of many new weapons systems over a long period of years. No matter how well in theory the components of a weapon will behave on paper, there is no assurance that they will work dependably together until they are put together and tried, and an antiballistic missile system cannot be tested underground and, therefore, no nation, our Nation could not put one safely into produc-tion and stockpile it which had never been tested. This is a layman's opinion based on experience.

On page 103 of the hearings, the following statement by Secretary McNamara appears:

In designing an antiballistic missile system, the major factors are reaction speed. missile performance, traffic handling capacity, capacity for decoy discrimination, resistance to blackout effects, and warhead technology.

The last two of these items, resistance to blackout effect and warhead technology depends on nuclear testing

At page 438 of the hearings, Dr. Edward Teller is recorded as saying:

I am in agreement with Secretary Mc-Namara that under the present ban we can proceed with our antiballistic-missile defense. I do not agree that we can complete this development. Actually, Secretary Mc-Namara did not say anywhere that he intends to deploy a system. Perhaps his lack of determination to deploy is due to some lack of knowledge. These are not black-and-white questions. I feel we need observation, traffic handling, the perfection of warheads, radar, all the points that the Secretary has made very effectively; I agree with all of them.

At page 452, Dr. Teller said, with reference to the necessity for atmospheric tests in connection with the development of an antiballistic missile:

On that point I will say that indeed we can do a lot in this development without atmospheric tests, we cannot bring the development to a reliable conclusion without atmospheric tests.

More than that, as we proceed in developing our defenses, we have to make choices. We have to decide at what altitude we want

to shoot down the aggressor.
Senator Lausche. I think you have covered that.

Dr. TELLER. What kind of rocket we need. A number of choices of that kind. This must be done often rather early in the game and to make choices without the knowledge that atmospheric testing could give us is a very distinct handicap.

SIGNIFICANCE OF POST-SEPTEMBER 1961 TESTS

Senator LAUSCHE. When you state that in your opinion Russia occupies a superior position to ours in connection with the antiballistic missile, what significance do you attach to the extensive and large tests which were made after September of 1961?

Dr. Teller. I would guess that the Rus sians may have acquired the bulk of their knowledge in this field in 1961 and 1962, although it is quite possible that they may have acquired quite a bit of their knowledge even earlier. They have been pushing missiles, rockets, much earlier than we have, and every indication shows that their interest and confidence in ballistic missile defense is older and stronger than ours.

ATMOSPHERIC TESTING AND SOUND MISSILE DEFENSE:

Senator Lausche. The statement is made by the Joint Chiefs further. I quote:

Both sides could achieve an antiballistic missile, but one with less desirable characteristics than would be the case if additional atmospheric tests were conducted.

May I have your comment on that statement, first as to its soundness and second as to whether Russia is ahead of us, because it has conducted these large-scale tests.

Dr. Teller, In general I agree with the statement. I consider it something of an understatement.

Senator Lausche. Will you give it in your light?

Dr. Teller. I would say that with atmospheric testing, there is a real chance to develop a sound antiballistic missile, a sound missile defense. Without such testing, it is my opinion that whatever we develop will be uncertain, imperfect, and that may not even be developed, because our doubts, together with the expenses, may persuade us from such a development.

The Senator from Louisiana [Mr. Long] then asked questions—which appear on page 467 of the hearingsfollows:

Senator Long. Doctor, you suspect, as I understand your earlier testimony, you suspect that in the last series of tests the Russians probably obtained the information that they would need to develop an antimissile missile, or to develop a ballistic missile defense, to put it another way.

Dr. Teller, I do not know how perfect

their information is, but I feel the probability is very common that they have deyeloped very relevant knowledge which will be useful for them in installing their anti-

ballistic missile systems.

Senator Long. In the event they were able to develop a missile defense against our ballistic missiles, and then proceed to breach the treaty just long enough to prove it out, would there be time for us to do the same thing after we found out that they had violated the treaty?

Dr. Teller. I am virtually certain there would not be time enough. We would be lucky to get off to meaningful testing in 3 months, whereas they, if they have indeed perfected, installed, but not completely proven out their antiballistic missile equipment, they could abrogate the treaty in a day, use the next week for 100 or 500 detonations, and if they then find the results unsatisfactory, they will have lost a treaty.

If they find it satisfactory, they will have won the world.

In addition to the need for weapons effects tests in our quest for an effective ABM system, I think it significant that we have conflicting testimony regarding our Nation's requirements for very high yield weapons on the order of 50 to 100 megatons. The problem has been under study for years, and clear and unequivocal decisions relating to our needs for such weapons and the techniques we would use in employing them still are not forthcoming. I can only conclude that our inability to make a firm military decision on this matter, perhaps, is the result of our lack of knowledge concerning the military effects of these weapons. It is unlikely that clear decisions will ever be forthcoming unless we are able to produce the device, to test it, and to measure and analyze its effects, as the Russians did nearly 2 years ago.

Mr. President, it seems to me that the cructal problem of weapons effects was epitomized by Dr. Foster in the course of a colloguy which is to be found beginning on page 628 of the hearings. I shall provide the following excerpts:

Senator Byrn of West Virginia. Dr. Foster, I have heard that we have as large a weapon as we could conceivably need. We can produce a 50-megaton weapon, and this would be as large as any country would ever have to have. It seems to me that this is really beside the point. Am I correct, Dr. Foster, in saying that

what should really concern us are the effects of the explosion of such a weapon upon our missile sites and upon our missile systems?

Dr. FOSTER. That is correct, Senator ByRD. Senator Byrd of West Virginia. Dr. Foster, if we confirm the treaty we will have to confine our tests to underground tests.

Now, with the information we already have as a result of previous testing in the atmosphere, and through the medium of underground testing, can we acquire satisfactory and dependable and conclusive information with respect to weapons effects upon sites and systems?

Dr. Foster, No.

Senator Byrn of West Virginia. Dr. Foster, this is the dilemma in which I find myself. I, too, would like to hope that con-firmation of the treaty would be a step toward peace and a step toward eventual disarmament. But I recall that the Russians were able to prepare for tests without our detecting such preparation, when they abrogated the moratorium.

I recall that they assured the President, to our great satisfaction and happiness, that weapons which were being moved into Cuba were defensive weapons and not offensive weapons, at the very time when he had in his own hands evidence to the contrary.

Now, it seems to me, in the light of the atmospheric tests which have been conducted and for which elaborate preparations were made, the equal of which we have not been able to conduct, that the Russians suddenly have come to a conclusion which they opposed heretofore; to wit, that they should enter into this kind of a test bantreaty.

Now, with the history of deceit that we have before us, I am afraid that they already have information which is vital to our security, and they may know what our own weapons systems and sites can stand by virtue of the tests which they have carried out, and if they presently intend or at some later date should decide to abrogate the treaty, then the additional disadvantage to which we would be put, I fear, might be very

dangerous to our security.

So with these fears in mind, unless some scientist can tell me that we can indeed extrapolate information through underground testing which will satisfy our fears with regard to weapons effects upon sites and systems, I am not satisfied with the argument that we should take into consideration the political judgments, because I do not believe that the military leaders are prepared to weigh those political judgments, and I do not believe that the scientists are. But I do believe that the scientists can tell us whether or not we can extrapolate information from underground tests that will satisfy our fears in the other regard.

Dr. FOSTER. Sir, there is no existing experimental data or theory, or to our knowledge, future underground tests that can provide you with the complete assurance you want.

Senator Byrd of West Virginia. I would just like to carry Senator Jackson's questions one step further, if I might, and tie them in with such a question I asked earlier.

Dr. Foster, I asked you earlier, if by using the information that we already have, and by conducting aggressively underground tests under the conditions of the treaty, we could acquire information which would satisfy our fears with regard to weapons effects upon sites and systems, and you indicated, I be-

lieve, that we could not.

Would your answer still be the same if I had framed my question differently to the extent that I had included the safeguards the Joint Chiefs of Staff have recommended?

Dr. Foster. Yes, it would have been the same. It is simply that the question of how hard anything is to electromagnetic phenomena, be it antiballistic missile defense or hardness of silos, has to do with matters that, in my opinion, are not sufficiently well understood to be able to say with full confidence that they will function as designed in a nuclear environment and this nuclear environment cannot be created by underground ex-

Senator Byrd of West Virginia. We are taking a great chance with the security of this country if we approve a treaty which prohibits our further testing in the atmosphere, and, consequently, learning by such testing important facts dealing with effects upon sites and systems?

Dr. Foster. You are taking a risk, and you cannot calculate it.

Senator Byrd of West Virginia. Regardless of these safeguards?

Dr. Foster. Regardless of these safeguards. Senator Byrd of West Virginia. Even though they are implemented to the fullest? Dr. FOSTER. That is correct.

(At this point Mr. METCALF took the chair as Presiding Officer.)

Mr. BYRD of West Virginia. Mr. President, with further reference to the vital issue of weapons effects on our sites and systems, and to the fact that we can acquire full information only through the medium of atmospheric tests, I should like to quote General LeMay, reading from page 370 of the test ban treaty hearing. General LeMay was asked the following question:

SURVIVABILITY OF MISSILE SITES

General LeMay, without tests on the hardness of our missile sites, can you be assured of the survivability of our second strike force?

General LeMay. Well, we have overdesigned to a great extent on our missile sites, so that we are reasonably sure that they will stand an attack all right. .

But you never can be positively sure until we test them under actual conditions, and this has not been done, of course.

On page 390 General LeMay said:

General LeMay. Let us put it another way: There are things you can find out about atmospheric effects in underground tests, but I would say these are in the minority about what we would like to know about weapons effects.

Pursuing that same issue of weapons effect, I read from page 443, in the testimony of Dr. Teller:

But this test ban has nothing at all to do with how many missiles either side builds. This test ban has something to do with knowledge, and it does not have to do so much with knowledge concerning aggressive potentials. It has something vitally important to do with knowledge concerning missile defense, concerning the vulnerability of our retaliatory forces. I believe that the Russians have acquired this knowledge. I believe that, because they have acquired this knowledge, they don't need any more atmospheric tests, and I believe that is why Khrushchev is willing to sign the treaty at present.

In 1960, he wasn't willing to sign, but now he had these magnificent test series of 1961 and 1962. He now knows how to defend himself. He now knows, probably, where the weaknesses lie in our defense. He has the knowledge, and he is now willing to stop and prevent us from obtaining similar knowledge.

If the Russians want to build a big missile force with which to attack us, they can do so legally under the present testing. What they need is knowledge, and that is what they have. What we need is knowledge and that is what we don't have.

As shown on page 464 of the hearings, I asked Dr. Teller the following:

Is there information regarding overpressure effects upon our weapons systems resulting from the explosion of high-yield nuclear devices in the multimegaton range that can only be acquired through atmospheric testing?

Dr. TELLER. If you tried to make a nuclear explosion underground, then everything connected with overpressure is very strongly influenced by the surroundings and the effects of such testing cannot by any trick that I have seen so far constitute a sufficient substitute for simple and straightforward testing in the atmosphere.

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Senator BYRD. Then is the absence of adequate and complete information regarding weapons effects upon our weapons sites and systems vital to the security of this Nation?

Dr. TELLER. I believe that it is vital.

Senator Byrn. If the safeguards recommended by the Joint Chiefs of Staff—and I am confident that you are familiar with the safeguards that were suggested in their position paper—are observed and carried out, will we be able to acquire the information we need to satisfactorily overcome what has

been termed by you to be a weakness vital to our security?

Dr. Teller. I believe that if these safeguards are observed, then the dangers which I have mentioned will disappear in part only. A lot of these dangers, a lot of these difficulties will remain.

Senator Byrd. Then your answer would be that we would not be able to acquire to our complete satisfaction the information that we need to overcome these vital weaknesses in our system?

Dr. TELLER. This would be my conclusion, uncertain as all such conclusions, but this would be it.

As shown on page 466, Dr. Teller had this to say with regard to weapons effects:

The main difficulty is just what you mention. We are probably, or quite possibly, at least, going to be faced with several missiles, and we should be able to shoot at all of them, and we should not be blinded by our first shot.

This means we must not make our first shot unnecessarily big. This means that we should know what is the probable right kill radius. This means that we should so design our missiles as to give it a maximum destructive effect at a minimum binding effect.

All these questions need testing and more testing, and after you have done it, you still need to test to see whether the whole thing works, whether there is no flaw in the actual operation.

On page 424 of the hearings it is shown that Dr. Teller said:

Secretary McNamara has told you, and he is right, that we can do a lot about missile defense. We can study the incoming missiles, we can study the decoys, and we can try to see the difference between them. We can perfect our radars, make them harder, more versatile, faster.

By underground testing we can develop the best kind of nuclear explosives by which to kill an incoming missile, because when you are shooting at such a fast and uncertain target as an incoming missile, you cannot hit it with a bull's-eye. You need a powerful counterforce, a small nuclear explosion.

Secretary McNamara has said rightly that we can do all that.

But there is one thing, one circumstance he did not explain. He did not explain to you that we must expect not 1 missile to come against us, but 5, and not to come alone but to come accompanied by 25 decoys. We have to discriminate between these, find out which are the dangerous objects and shoot them down, not some of them, but all of them. The first shot that we fire will blind us, and will make us less prepared to shoot against the second missile that comes hard on the heels of the first.

I quote Secretary McNamara on weapons effects tests, reading from page 104:

The problems of nuclear technology here relate to the vulnerability of the balistic missile warheard to kill by blast or by radiation. The latter vulnerability, as to radiation, can be tested underground, but the former cannot be fully tested underground.

We have not, and we believe that the Soviet Union has not, explored by full-scale high altitude tests the vulnerability of reentry vehicles to blast.

Atmospheric testing would enable us to confirm the enhanced resistance of new, hard-warhead designs to blast. Without the confirmation which dynamic tests of reentry vehicles would provide, we will have to rely on extensive extrapolations, and, therefore, there will be greater uncertainties than would otherwise exist.

I have attempted to indicate, by quoting from distinguished and eminent scientists and military experts who gave testimony during the course of the hearings conducted by the Committee on Foreign Relations and by the Preparedness Investigating Subcommittee of the Committee on Armed Services, that the matter of weapons effects can be vital to the security of our Nation.

Some of the witnesses expressed the fear that the Soviet Union may have acquired such vital information concerning weapons effects upon sites and systems during the comprehensive and effective postmoratorium atmospheric tests. If the Soviets have not so developed such information, the danger in our ratifying the treaty, and by so doing precluding ourselves from engaging in atmospheric testing, would not be so great. We cannot be sure, however, that the Soviet Union has not developed such information.

Certainly we must be suspicious of Mr. Khrushchev in regard to all things, and particularly in this situation, since he has upon at least two occasions rejected a somewhat similar treaty and then suddenly, in this year of 1963, has reversed his position and indicated a willingness to enter into this treaty.

I am no expert, but I have listened to the experts, as have other Senators. The Soviet Union carefully planned elaborate tests—such plans perhaps extended through the entire 34 months of the voluntary moratorium—and surprised us with their statement that they were going to abrogate the moratorium. Then, subsequent to the abrogation of the moratorium, they carried out a successful series of tests. Furthermore, they have had the opportunity and time, at least, to evaluate the information which could be extrapolated from such tests, and may have found that important discoveries are in their possession with reference to weapons effects upon sites and systems.

The possibility is very alarming to me, as it has been to Dr. Foster, Dr. Teller, General Power, Admiral Burke, General LeMay and others. Since we cannot be sure, I fear the results of ratification of the pending treaty, because under the treaty we can never fully develop such information through underground tests alone. The case, therefore, in respect of weapons effects is simply this. The Soviets effected a planned abrogation of the voluntary moratorium. Through subsequent atmospheric tests, they may have acquired vital information which can only be developed by testing in the atmosphere. Having such information in their possession, and realizing that our failure to conduct atmospheric tests to the same degree following the moratorium leaves us in an inferior position, the Soviets may have every reason to be willing to sign a treaty which will freeze us in that inferior position.

Support of the test ban springs largely, I believe, from an intense wish that the world were different than it actually is. It springs from viewing the world as we would like it to be, rather than as it is. It springs from a genuine desire for peace and is so sincere and so overwhelming that the nature of communism is forgotten. Let us remember that the Communists have only one purpose to which all their actions are geared. This purpose is world conquest.

The aims which the Communists seek and the methods they are willing to use have been vividly spelled out many times by the Communists themselves. On December 26, 1922, in his report to the 10th All-Russian Congress of Soviets, Stalin declared that the decision to form a union of Soviet republics was "another decisive step toward the amalgamation of the toilers of the whole world into a single world Socialist Republic." The handbook of Marxism states further the Communist objective in the section on the program of the Communist International. It says:

Thus, the dictatorship of the world proletarlat is an essential and vital condition precedent to the transformation of the world capitalist economy into Socialist economy. This world dictatorship can be established only when the victory of socialism has been achieved.

And Stalin supported this objection, for he said this:

For the victory of the revolution in one country, in the present case Russia * * * is the beginning of and the groundwork for the social revolution.

And with the death of Stalin, Malenkov—notwithstanding his professions for a new order of coexistence—revealed his faith in Soviet destiny when he said:

We know firmly that the victory of democracy and socialism throughout the world is inevitable.

Dimitri Manuilsky, active in the revolution, one-time chairman of the Council of People's Commissars of the Ukraine S.S.R., and a Communist representative at the United Nations, described, in a lecture at the Lenin School of Political Warfare, the tactics that the Communists would some day employ. He said:

War to the hilt between communism and capitalism is inevitable. Today, of course, we are not strong enough to attack. Our time will come in 20 or 30 years. To win we shall need the element of surprise. The bourgeoisie will have to be put to sleep. So we shall begin by launching the most spectacuar peace movement on record. There will be electrifying overtures and unheard of concessions. The capitalist countries stupid and decadent, will rejoice to cooperate in their own destruction. They will leap at another chance to be friends. As soon as their guard is down, we shall smash them with our clenched fist.

Lenin outlined the modus operandi for Communist domination of the world. He said:

First we will take Eastern Europe, then the masses of Asia. Then we will surround America, the last citadel of capitalism. We shall not have to attack. She will fall into our lap like an overripe fruit.

Khrushchev, true to form, told Western diplomats at a reception in Moscow on November 18, 1956:

Whether you like it or not, history is on our side. We will bury you yet.

Lest any person feel that Khrushchev's words were spoken in a moment of jocundity, they would do well to reflect upon what he said when, on June 2, 1957, he appeared before an American television audience:

I can prophesy that your grandchildren in America will live under socialism.

Communist policies are firmed to unremitting war on non-Communist nations—war in the military sense at times; at other times, a war of doctrinal tactics, of infiltration and subversion, of economic piracy and the stimulation of moral chaos.

I do not wish to labor the point, but it is clear; and, irrespective of changes in leadership, the key objective of world domination has remained constant.

THE SOVIET RECORD ON TREATIES

We learned long ago that the Soviet leaders cannot be trusted and that their agreements are usually worthless. As a matter of fact, we have no less authority for our guidance than Stalin, Lenin's successor. Stalin was frank to say:

Words must have no relation to action—otherwise what kind of diplomacy is it? Words are one thing, actions another. Good words are a mask for concealment of bad deeds. Sincere diplomacy is no more possible than dry water or iron wood.

The unfolding tragic history of the times in which we men have lived provides the stark and irrefutable evidence that the Communists keep only those agreements which are in their interests to keep, and that they will break those agreements which no longer serve their interests. And the fact should not escape us that "their interests," as used here, are not the interests of a free people whose rulers govern by the consent, freely expressed, of the governed; but, rather, they are the "interests" of the international conspiracy which has its roots in the Kremlin and which seeks to impose its ideological will upon other governments throughout the world so as to assure the final outcome about which Lenin, the high priest of Communist strategy, spoke in 1923, "the final victory of socialism (communism)."

The long list of pledges broken by the Soviet Union leads almost inevitably to the conclusion that many of the agreements were entered into without good faith and in accordance with the familiar Communist dictum:

Promises are like ple crusts—made to be

As long as we have an agreement which does not provide for inspection of Soviet territory, so that we can see for ourselves what the Soviet Union is doing, we are in effect relying upon trust that the Soviets will abide by the treaty. Yet, many are the instances in the past when the Soviet Union has demonstrated its disrespect for agreements solemnly

entered into. At least a few of these are worth remembering at this time.

On September 28, 1926, Lithuania and the Soviet Union concluded a nonaggression pact. On June 15, 1940, Lithuania was invaded by Soviet forces.

On May 4, 1932, Estonia and the U.S.S.R. signed a nonaggression pact. Eight years later, on June 16, 1940, Soviet military forces invaded Estonia.

On February 5, 1932, Latvia and the Soviet Union signed a nonaggression pact. Eight years later, on June 16, 1940, Soviet military forces invaded Latvia.

At the Yalta Conference in February 1945, the United States, Great Britain, and the Soviet Union agreed to help the peoples liberated from Nazi control to solve their political and economic probmeans. The by democratic lems U.S.S.R. flagrantly violated the letter and spirit of this pledge by installing Communist regimes in Bulgaria, Hungary, Poland, Czechoslovakia, and Rumania. Also at Yalta, the Soviet Union agreed that the Republic of China should retain full sovereignty in Manchuria. The Russians flouted this agreement by tactics of obstruction designed to deliver Manchuria to the Chinese Reds.

At Potsdam in July 1945, the United States, the U.S.S.R., and the United Kingdom agreed that, subject to the requirements of military security, freedom of speech, freedom of the press, and freedom of religion would be respected in the occupation of Germany. As everyone knows, Soviet authorities in East Germany have curtailed genuine freedom of speech and press by imposing the totalitarian instruments of suppression, censorship, and secret police. Basic legal and political rights have been the victim of authoritarian edict and one-party control, with the inevitable result that a puppet regime has been installed.

Most fresh in our minds, of course, is the summit conference of the Big Four in Geneva in July 1955. This high-level parley in the diplomatic Alps engendered great expectations among the peoples of the free world.

The single most specific agreement made at Geneva was on the German question. The four powers declared it was their purpose to settle the German question and the reunification of Germany by means of free elections which shall be carried out in conformity with the national interests of the German people and the interests of European security.

As Mr. John Foster Dulles later said, the Soviet Union failed to keep this solemn pledge, and on November 16, 1955, the Foreign Ministers of France, the United Kingdom, and the United States stated that negotiations on the German question had reached a deadlock, because the Soviet Foreign Minister insisted on a German policy which would have involved the continued division of Germany as well as the eventual dissolution of the Western security system. In a letter dated February 28, 1958, Soviet Foreign Minister Gromyko tore up the final scrap of the Geneva agreement when he said the German question is a

question of relations between the two existing German states.

To those who may suffer the illusion that the real nature of international communism can be changed by any new show of amiability and affability put on by the Russians in connection with the signing of this treaty, one might only point to the announcement, which came on the heels of the 1955 Geneva adjournment, that the Soviets were increasing their military forces in East Germany. . Then, too, the Israeli plane disaster, in which more than 50 persons were shot down by the Bulgarian Communists, only conformed to the Russian pattern of committing overt, violent acts in order to demean the United States before the eyes of the world. "So sorry," said the Bulgarian Communists, and they felt that they had atoned for their triggerhappy brutality. One must not forget, too, that it was virtually on the eve of the Geneva Conference that the Russians shot down one of our American planes over international waters, inflicting severe burns upon American boys, scars which some of the victims will carry to their graves. In that instance, the Soviets quickly assumed the partial responsibility, a development, based upon past experience, that warranted the sound conclusion that they knew it was their full responsibility. Our State Department made a hasty agreement, accepting the Soviet offer to pay for the damages.

I mention these incidents at this juncture merely to point up the sorry standards of measurements we have too often used in our official dealings with the Russians and to stress the fact that our sincere desire for peaceful relations with the Communists will carry us into serious danger unless we base our reckonings and policies on realism.

SOME ADDITIONAL CONSIDERATIONS ON QUESTIONS RAISED BY THE NUCLEAR TEST BAN TREATY

First. A detente.
Second. The leopard's spots.
Third. Time and circumstance.
Fourth. Peace with justice.
Fifth. World opinion.
Sixth. The basic issue.

1. A DETENTE

Mr. President, as one explanation for Mr. Khrushchev's willingness to be a party to this treaty, the thought is advanced that he wishes to attain a detente with the West. I consider it to be merely another one of those cycles in which the Communists follow periods of tension with periods of seeming relaxations. The Soviets may desire, at this point, a period in which to consolidate gains and repair weaknesses.

It is impossible, of course, for us to know with certainty what the reasons are for the sudden change of Soviet position and the turn of events. But there is no evidence that Khrushchev has finally decided to work for a stable and lasting peace.

Many of us have asked, "Why did Khrushchev agree at this time to an agreement he had refused even to discuss in September 1961 and August

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1962?" In answer, we have been told that in October 1962, during the Cuban crisis, the Russian leader "peered into the pit of the inferno," realized for the first time the horrors that a nuclear exchange could unleash upon the world, and became convinced that the real interest of the Soviet Union would best be served by a relaxation of world tensions as a prelude to control over world armaments.

Those who hold this view seem to forget that the immediate result of the Cuban crisis was a "hardening" of the Soviet position on on-site inspection at the 18-Nation Disarmament Conference in Geneva, that the Soviet decision to participate in the pact did not come until the Soviet Union had completed its atmospheric test series, and that all the comments relating to the inferno into which world leaders peered during the Cuban crisis have come from officials of the free world. One is almost tempted to ask, "Who frightened whom?"

There is little evidence of any sincere effort on the part of the Soviet Union to correct or modify the real causes of world tensions. Soviet forces still occupy Cuban soil. The Berlin wall still stands. East Germany still cannot participate in free elections or in a referendum on reunification. The Soviet leadership continues to threaten the free world with bombs in orbit and 100-megaton nuclear weapons. Subversion and warfare continue under Soviet sponsorship around the periphery of the free world while the Soviet and Chinese heartlands remain relatively immune.

The Soviet leadership may have peered into the inferno last October, but I am not convinced that they were reformed by what they saw.

I feel that, as has been the case before, the Soviets desire a breathing spell for the purpose of regrouping forces and for reexamining strategy and tactics. As Adm. Arleigh Burke testified during the hearings:

Based on the past actions of the Communists when they make a sudden aboutface, as they have done in the case of this treaty the provisions of which they have rejected on several previous occasions, it would seem that they wish to seek some advantage over the United States.

They never have been generous. They always have acted solely in their own interests to reach their own goal of domination.

James David Atkinson, Ph. D., Associate Professor of Government at Georgetown University, in his book "The Edge of War," 1960, includes an interesting chapter entitled "The Fusion of War and Peace." Dr. Atkinson, a West Virginian, discusses the Soviet purpose of seeking a "breathing space," from time to time, in the course of the Communist offensive:

Furthermore, any disarmament concessions will be, on the part of the Soviet bloc, in the nature of a detente. But the democracies, by contrast, have in the past tended to consider such arrangements on a permanent or semipermanent basis.

The new phase of Soviet strategy does not imply an abandonment of the ultimate goal of a Communist world. This is clearly spelled out by Khrushchev's statement immediately preceding his American visit: "We Communists believe that the idea of

communism will ultimately be victorious throughout the world, just as it has been victorious in our country, in China, and many other states."

The idea of a breathing space during which Soviet strategy will call for the struggle against the non-Communist countries to be conducted in a more sophisticated form was also pointed out in a Pravda editorial that laid down the line in these words: "Today we are living at a time when the historic transition from socialism to communism is taking place. * * At the United Nations, Comrade Khrushchev put forward the principles of U.S.R. foreign policy and on behalf of the Soviet Government submitted proposals for universal and complete disarmament of all states, which opens up a new era in the struggle for world peace."

A breathing space in the cold war between the Soviet Union and the NATO allies will also permit the Chinese Communist junior partner to stepup cold war activity in the Far East while the U.S.R. regroups its forces in the other half of the globe.

The apparent new phase in Soviet policy can be expected to last only as long as it offers advantages to the Kremlin leadership. Undoubtedly there will be those in the Soviet high command who will urge a harder policy against the West, for they will see signs that will confirm their belief that the capitalists are sufficiently decadent and weakened to be eliminated sooner rather than later. From time to time the non-Communist world will be threatened, and incidents will be manufactured to test its strength. The United States will remain the principal barrier to Soviet bloc aspirations. Nineteen hundred and fifty-eight saw the beginnings of a subtler policy by the Soviet Union to dissipate American determination to maintain this barrier. The decade to 1968, and especially the years from 1961, will be the crucial period in the development of Soviet strength and the attempted softening of the American will to resist and of the ingredient that chiefly supports that will, our military strength Signs of weakness on the part of the United States will no doubt increase the momentum of the Soviet advance and lead the Kremlin to believe that it need not delay the last stage of the Communist offensive,

I believe Dr. Atkinson's words are prophetic.

2. THE LEOPARD'S SPOTS

Many of the attitudes and stratagems which mark the Communists' approach to negotiations are baffing in the extreme so long as we believe that they are seeking peace, or even a significant lowering of tensions. But they become understandable as soon as we realize that they are seeking only, in Lenin's phrase, "an agreement concerning war." Marxist-Lenin thinking in this regard has not changed from the idea of one-time Politburo member Grigori E. Zinoviev, who said on February 2, 1919:

We are willing to sign an unfavorable peace with the Allies. * * * It would only mean that we should put no trust whatever in the bit of paper we should sign. We should use the breathing space so obtained to gather our strength.

Stated another way, if the other party to such a treaty believes that it is being signed in good faith, he is to be rated as a victim of his own naivete: what Lenin called petty bourgeois trustfulness.

History repeats itself. This is a common saying which we have all heard from our youth up. If, then, we refuse to understand the lesson of history, we are condemned to repeat the errors of the

past. We shall suffer all the more if we insist upon closing our eyes to that inevitable history which Communist leaders, as did Hitler in Mein Kampf, write in advance.

If, indeed "coming events cast their shadows before," we should long ago have taken warning from a commitment, grievously broken, of 30 years ago. Litvinoff's pledge to President Roosevelt is referred to on page 287 of "What We Must Know About Communism," by Harry and Bonaro Overstreet, 1958:

Even the ideological outposts of empire rest on broken promises. Thus, on November 12, 1933, Litvinoff gave a four-point pledge to President Roosevelt-as a condition of the U.S.S.R.'s being officially recognized—guaranteeing that the Soviet Union would refrain from all propaganda and organized activity that had as its aim the overthrow of the U.S. Government or the undermining of our institutions. Five days later, however-with recognition accomplished—he released a statement which said, "The Third International is not mentioned in this document. You must not read into it more than was intended." A month later, the Comintern met in Moscow and adopted resolutions which instructed all parties—including the CPUSA—that there was no way out of the general crisis of capitalism other than the one demonstrated by the Bolshevik revolution.

In His Sermon on the Mount, Jesus uttered an oft-quoted truism: "Wherefore by their fruits ye shall know them." The Soviet record of deceit and duplicity, treachery and perfldy is clearly written. But that record is not complete, nor, in my judgment will it be complete as long as leaders in the Soviet Union subscribe to Communist ideology.

The words of the Prophet Jeremiah, heard above the din of the centuries, are as meaningful in our age as they were in his tempestuous day:

Can the Ethiopian change his skin, or the leopard his spots? Then may ye also do good, that are accustomed to do evil.

That the leopard has not changed his spots should be evident from the following statement by Mr. Khrushchev—a statement arrestingly free from dissimulation. Khrushchev, who some appear to believe is somewhat less dangerous than was Josef Stalin for the United States, said on September 17, 1955:

If anyone thinks that our smiles mean the abandonment of the teachings of Mark, Engels, and Lenin, he is deceiving himself cruelly. Those who expect this to happen might just as well wait for a shrimp to learn how to whistle.

3. TIME AND CIRCUMSTANCE

It has been suggested that we cannot now reject a nuclear test ban treaty since we advanced the same offer in 1959 and again in 1962.

The situation which now confronts the United States is quite different from the situation at the time of the previous offers. In 1961 and 1962, the Soviet Union carried out an extensive series of nuclear tests in violation of previous promises to refrain from testing. As is well known, much time is required in order to evaluate such a series of tests. The Soviet evaluation of the 1961–62 series was completed during 1963. The Soviets now have the opportunity to freeze us

into an inferior technological position. Consequently, the situation as of today has clearly changed and, in prudence, we cannot be bound by offers made when quite different circumstances obtained. Proponents of the nuclear test ban treaty would quite clearly have a much stronger case had the Soviet Union refrained from conducting such an extensive series of nuclear tests in 1961–62.

4. PEACE WITH JUSTICE

It has been argued that if we reject the present treaty we will never be able to get the Soviet Union to sign another test ban treaty.

This argument ignores 46 years of Soviet diplomacy. From the Bolshevik seizure of power in Russia down to the present day, if there has been one constant in Soviet diplomacy it has been, above all, the constant of flexibility. As shown over the course of thousands of negotiations, the Soviets are quite willing to bargain endlessly at the diplomatic table. It is not they, but we who become restless and believe that some action must be taken now, some diplomatic agreement reached at once. And this flexibility on the part of the Soviets has consistently been tied to a keen appreciation of the balance of military power in the world. When the military power of the United States has been in the ascendancy the Soviets-being always flexible, as they are—have been inclined to be more reasonable. When the military power of the United States has begun even a slightly apparent decline, the Soviets have tended to become bellig-erent, bellicose, and intransigent.

Paradoxically, rejection of the treaty may eventually bring about a treaty embracing solid inspection safeguards—and which the Soviet Union would accept. How, one may well ask, could such a desirable end be achieved? If the United States tests—as we have not done-and realizes the full potential of of which we are capable, we can prove conclusively to the Soviet Union that they cannot compete with us in nuclear The Soviet record is clear. weapons. They are the hardest of hard negotiators. But they do respect power. Here again the record is clear. If faced with a continuing position of inferiority in nuclear technology, they would have every reason to accept a valid treaty providing sound rules of inspection. Unfortunately, it would appear that they accept our present desire for a treaty as a sign of weak-By rejecting the treaty we can disabuse them of this notion. Then, patiently but purposefully, we can go forward to build an enduring peace. Not a tenuous peace which may expire as quickly as did Neville Chamberlain's "peace in our time." But an enduring peace based on power with purpose. Let us not fimidly shrink from the atom, but, knowing that God is good, have faith that this "Nation under God" was given great power—from the atom—to be used in the pursuit not of peace alone, but of peace with justice.

Mr. LONG of Louisiana. Mr. President, will the Senator yield?

Mr. BYRD of West Virginia. I yield. Mr. LONG of Louisiana. In line with what the Senator is saying, if we agree

to the test ban treaty minus inspection, and the Soviets are able to victimize us in one way or another, as by testing on Chinese soil and pushing ahead to the development of new plans based upon knowledge already obtained, would it not be likely that the Communists would have even stronger reason to believe that they might eventually be able to lure us into a disarmament treaty, under which we would forgo essential inspection or agree to the kind of inspection the Soviets might offer?

For example, they are proposing to have inspections at certain places which they would designate—a particular crossroads or railroad crossing that they would agree to. But if we agreed to such a plan, they would "route the train" the other way, so that it not pass the locations of the sites to be inspected, in an attempt to mislead or deceive us. Thus the seeds of our own undoing would be contained in such an agreement.

On the other hand, if we insisted that we would make no agreement until we were satisfied that such a treaty served our purpose equally with theirs, we would have executed an agreement under which we could automatically detect a violation.

If we obtained that kind of agreement, would it not be the basis for making the Soviets realize that eventually, at such time as disarmament came, it would have to be on a foolproof inspection basis?

Mr. BYRD of West Virginia. The suggestion is an interesting one.

Mr. LONG of Louisiana. If we entered into this treaty minus inspection, the Communists would be given every incentive to feel that if they held out long enough, they could get a disarmament agreement minus inspection,

Mr. BYRD of West Virginia. Earlier this week the distinguished chairman of the Committee on Armed Services [Mr. Russell] lucidly and cogently presented a logical step-by-step hypothetical case precisely in point with what the Senator from Louisiana has just said. I thank the Senator.

5. WORLD OPINION

It is urged that so many nations of the world have already signed the nuclear test ban treaty that the United States risks the censure of world opinion if we refuse to approve the treaty. This is really one of the strongest arguments sustaining the decision, right or wrong—and only the future will reveal this—of those who will support the treaty. At least, it appears to be one of the major factors in their decision.

There seems to be a great fear of flying in the face of world opinion if we reject the treaty. Voss, in Nuclear Ambush, aptly puts this question into focus:

Before the world is overcome with guilt for having produced the atomic age's brilliant mushroom cloud, it would do well to reflect how much more of this globe would be under the communistic cloud today were it not for the U.S. nuclear capacity.

I think we should pause and reflect about the matter of world opinion, as it has been injected into the issue before us. I, too, will agree that rejection

of the treaty by the Senate would have an adverse psychological effect upon the countries that have signed the treaty. But is this to deter us from acting, even at this late hour, in our own best interests and in the best interests of those who might momentarily condemn us? It should give us pause to remember that the overwhelming majority of the signatories will never become nuclear powers. Many of these signatories could ill afford a modern battleship.

To allow world opinion to dissuade us from taking a course away from danger is to allow "the tail to wag the dog," if I may refer to a common expression. Let us not forget that when we talk about the striking power that is built around the Strategic Air Command and the Polaris submarine, we are talking, in General Power's words, "about better than 90 percent of the striking power of the free world." This being the case, why should the United States—a country which, in the event of all-out war, would be expected to deliver 90 percent of the striking power for the protection of the free world—hesitate to act in accordance with its own safety, and that of its allies, even if it means that we temporarily disappoint the portion of the free world complex which can supply only 10 percent of the striking power?

A large percentage of those who would condemn us for rejection of the treaty would be neutral states. Some of these have been more or less chronic critics, not only of our foreign policy, but of our domestic policies, as well.

In this trying hour we should heed the words of the Psalmist: "Be still, and know that I am God." Perhaps if we would but take a moment in this mad rush of life and "be still" to ponder and meditate upon the troublesome aspect of world opinion as it is involved in the momentous question before us, we would find an inner counsel and an inner strength that would enable us, not "to see through a glass darkly," but to come face to face with our destiny.

American is a great nation. It has long been a good neighbor to the countries that join its unwalled and unguarded borders. Its sons and daughters have shed their blood more than once in the cause of liberty. It has freely poured out its largess to other nations, small and large, throughout the earth. Many of the signatories of the treatyin fact, virtually all of them—have, at one time or another, been the recipients, in one way or another, of our beneficence. America's good will again and again has been liberally demonstrated by the outpouring of her billions and by her other deeds of kindness. What more is needed to convince the world of the peaceful motives of the greatest nation in all the ages?

There are but few nations that have power to alter the course of world history. America is one of the few. The overwhelming majority of nations will be able in the future, as they have been able in the past, to contribute but little to the determination of human events and to the course of the stream of history.

Those who would condemn us lack the power to take "at the flood" that "tide in the affairs of men which leads on to fortune." But not so with America. She has the power and the resources to direct the path of events.

Along with this power, America has a duty, in this situation, to act so as to insure that communism will not be "the

wave of the future."

But we cannot temporize, and we must not shrink from our oft-unpleasant responsibility. What really counts so much is, not world opinion in this era of confusion but, rather, what will preserve this Republic in all the years to come.

I refer again to "An Appraisal," a chapter in Nuclear Ambush;

For the United States, it matters only to a minor degree—it is not even morally defensible—if neutrals complain about our sprinkling them with radioactive fallout that may possibly harm a very few of their people. Dysentery and influenza, which the complainers export to us, more than balance the grievance lists. If the safety of all America is at stake, however, one takes the risk of harming a few people, foreigners or fellow citizens. We can regret the injury—perhaps try to compensate in some way for it. But we cannot sacrifice our whole Nation's safety or our own very lives, out of deference to a vague fear that is more mystic than scientific—

Or real.

Voss clearly reflects the Soviet Union's disregard for world opinion on page 532 of his book:

Test ban advocates said Russia could not afford to cheat, because she would be grievously embarrassed if she were caught. But the Communists dared to cheat on the Korean and Indochinese armistice agreements and seemed to bear up extremely well, if they suffered any embarrassment at all. The Russians later forced abandonment of the whole premise when they resumed testing in September 1961, boasted of it, and tried to intimidate the world.

The fact that "world opinion" has its curse as well as its blessing is articulately portrayed in this final excerpt from Voss' work:

There are some lessons to be drawn from the history if the nuclear test ban issue. One of the first is that it is extremely dangerous to put off a showdown with "world opinion" over issues vital to the national security. The United States got involved in a nuclear test ban negotiation more be-cause it "wanted to be nice" to the rest of the world than because it believed its own security interests would be served. It may or may not have been true that wiping out the danger of nuclear war would have been in the national interest, if it were even possible. But it was clearly perceived in the days before 1958 that a nuclear test ban alone could not possibly accomplish this, Later, the United States stumbled rather than walked into the test ban ambush, humoring the worriers of the world, who depended on the United States for protection, rather than leading them. Humoring the fainthearted, when confronted with a ruthless adversary like Soviet communism, has proved to be a dangerous game.

Indeed, if the question before us were not so sobering, one might, in being confronted with the argument that we should not fly in the face of world opinion—that of 97 nations—brush aside the thought, by simply referring to Thomas Carlyle, On Boswell's Life of Johnson.

Aesop's Fly, sitting on the axle of the chariot, has been much laughed at for exclaiming: "What a dust I do raise."

In answer to those who urge that rejection of the treaty risks the censure of world opinion, it is a temptation to point out that the general peace—the freedom from a total war—enjoyed by the world since the end of World War II has not been brought about by world opinion. It results, as Sir Winston Churchill has reminded us, from the blunt fact that the United States has possessed such overwhelming power in nuclear weapons and their delivery capability as to insure a general peace.

Such an answer, I say, is indeed tempting, for it is true. But there is an even more compelling answer. The nuclear test ban treaty is before the Senate of the United States for serious and prayerful deliberation. It is to be hoped that the United States is not engaged in an international popularity contest. compelling answer is, not how many Nations have ratified this treaty, but that the United States adopt the course of action that is right. British Prime Minister Neville Chamberlain returned from Munich with the plaudits of most of the nations of the world that he had brought peace in our time. The British press recorded that massive crowds hailed him in London on the night of his return from Murich, and that the cheering masses joined in singing "For He's a Jolly Good Fellow." But did he do what was right?

Mr. BYRD of West Virginia. Mr. President, we come to a discussion of the basic issue of the nuclear test ban treaty.

THE BASIC ISSUE

The basic, the overriding, issue is whether the treaty constitutes a risk to the continued military superiority of the United States and, if so, whether the risk to that superiority is a risk to peace.

That the treaty constitutes a serious risk to the continued military superiority of this Nation is clear, as I think I have already shown. This is my judgment of the matter, but it is based upon a careful weighing of the evidence. And while I do not stand with the majority in this judgment, I do not stand alone.

The ultimate question, therefore, is this: Is the treaty a risk to peace?

Since the end of the Second World War the world has witnessed an uneasy peace which some have called the cold war. But there has been a general peace, an absence of general war. What has maintained this general peace? Not an American, as I have already indicated, but an Englishman has given the most cogent answer. Sir Winston Churchill has said that the overwhelming nuclear superiority possessed by the United States has kept the peace. Clearly, anything which diminishes this nuclear superiority is a step which diminishes the power to maintain this general peace. It is a step which may encourage any aggressor-minded nation to take a risk which it would otherwise be inhibited from taking, the risk of war.

Speaking in Yugoslavia on August 21,
 1963, Soviet Premier Khrushchev said:

You and we have mutual aims, the struggle to construct socialism and communism. You and we have a mutual enemy: imperialism.

Will the effects of the nuclear test ban treaty increase the risk of war by encouraging Khrushchev—or his successor—to take risks against the "enemy" which would otherwise not be taken? To answer this hard question easily in the name of the relaxation of tensions is tempting. It may even be momentarily popular. But a harder course of action is that enjoined by the admonition of the Bible to act with prudence. Using words so applicable to the question of trust today, to the spirit of the nuclear test ban treaty, the psalmist said:

The words in his mouth were as smooth as butter, but war was in his heart.

CONCLUSION

Mr. President, I have reached my conclusion to vote against this treaty. shall do this sorrowfully. Sorrowfully because it places me in opposition to the position of our President, a leader who has earnestly sought to find a path of hope in his pursuit of peace. I respect and honor our Commander in Chief. Yet, all men are fallible, and all may, therefore, err. As a Member of the Senate, upon whose shoulders rests an equal portion of the awesome responsibility of choosing the right course as we stand at what may be the last great crossroads, I feel it imperative that duty should rise above all things and that in the course of fulfilling my duty, I am bound to be true to my convictions. My convictions have led me to speak the words I have spoken today and they will lead me, if I live, to carry out my announced intention to cast my vote against confirmation of the treaty. For, as Robert E. Lee said:

If we, only to please the people, stand for that which we disapprove, how, then, can we later defend our actions?

I hope that I am wrong in my apprehensions, because as the distinguished chairman of the Senate Armed Services Committee said earlier this week, if those of us who are against this treaty are wrong in our decision, then, we will all be the happier for it.

Paul the Apostle said: "Where the spirit of the Lord is, there is liberty." America's greatness has been, from the beginning, of the spirit. There have been times recently when I have thought that America's greatness had slipped from her grasp, but this cannot be right. Human destiny will still be influenced by an America that calls back again her greatness, because there is yet an America that, in this conflict of wills and ideologies and ways of life, can draw once more on her spiritual heritage with the call to action of the Prophet Isaiah:

Strengthen ye the feeble hands, and confirm the weak knees. Say to the fainthearted: Take courage, and fear not.

A people that thus recalls its heritage of courage may yet ensure that "the edge of war, like an ill-sheathed knife, no more shall cut its master."

Mr. President, I apologize to the other Members of the Senate who have been discommoded by my long and tedious statement. I recognize that those of us who take the position I have taken are assuming an unpopular position in this matter. I accord to those who support the treaty, however, as I stated in the

beginning, the same sincerity of purpose and the same dedication to the security of our country as I claim to possess.

We have all examined the same testimony, the same evidence, on the question which we soon must decide. We have listened to the same witnesses. But, having weighed this evidence, having evaluated it, each of us has attempted to judge, in his own mind and in his own conscience, what his decision should be. And we shall not all agree.

Regardless of the decision of each of us, every Senator has conscientiously strived to wrest from this agonizing question the answer that will serve his country best. For, differ though we will, the consolation may be ours that we have labored in the spirit of the words engraved on a statue which stands in the State capitol at Atlanta, Ga.:

He who saves his country saves all things, And all things saved will bless him.

He who lets his country die lets all things

And all things dying curse him.

Mr. THURMOND. Mr. President, will the Senator yield?

Mr. BYRD of West Virginia. I yield to the Senator from South Carolina.

Mr. THURMOND. I congratulate the able Senator from West Virginia for the magnificent address he has made today against the ratification of the nuclear test ban treaty. It is one of the most scholarly addresses I have heard during my service in the Senate. It has been clear, forceful, and logical.

In his address he has raised the different arguments seriatim in favor of the treaty, discussed them, and successfully

refuted them.

In his address he has discussed arguments against the treaty that should appeal to Members of the Senate, and I believe will appeal to the American people. These arguments are sound and

they are logical.

In his address he has discussed the nature of the Soviet Communist threat, which we know is a most dangerous and vicious threat. Lenin said, when he took over Russia in 1917, that the aim of the Soviets was to be the gravediggers, the heirs, and successors to the governments of the world. The Communists have never departed from their goal. Their

goal today is world domination.

The able Senator from West Virginia has discussed this topic with ability, the same as he has discussed the Soviet record on treaties. It is clear that the Soviets will not keep a treaty except when it is in their favor. The American Bar Association had a study made, and it found that the Soviets had broken 50 out of 52 major agreements. They had broken hundreds of other agreements. The Senator from West Virginia has shown clearly their perfidy, treachery, and lack of good faith in keeping agreements.

In addition, the Senator from West Virginia has discussed other questions that have been raised by the nuclear test

ban freaty.

All in all, he has delivered a very comprehensive address. The address should be read by every Member of this body. I do not see how any openminded, fair,

objective person could read the address and reach any conclusion other than that reached by the distinguished Senator from West Virginia—namely, that the treaty is unwise and that the Senate would walk the path of wisdom if it failed to ratify it.

Again I congratulate the able Senator for his fine address.

Mr. BYRD of West Virginia. I thank the Senator from South Carolina for his generous and kind remarks.

Mr. RUSSELL. Mr. President, will the Senator yield?

Mr. BYRD of West Virginia. I yield to the Senator from Georgia.

Mr. RUSSELL. I extend my hearty congratulations and strongest commendations to the Senator from West Virginia for this very remarkable presentation.

The Senator is a careful man. I have worked with him on committees. I know the care he exercises even in minor matters before reaching a conclusion. In this case, the remarkable statement he has made indicates a most thorough and exhaustive study of all the evidence that was available on the subject of the proposed treaty.

All of us have a pretty clear idea about the outcome of the voting on the proposal when the Senate takes it up next Tuesday morning under the unanimous-con-

sent agreement.

However, I am willing to risk a prophecy—and that is always a dangerous thing to do—that the events of the next 12 months will completely justify the unstinted effort and the devoted patriotism which the Senator has put into his analysis of the treaty. He has documented it so thoroughly that if this country endures and some historians of the future decide to make a study of the subject, they will find most of the material they will need in the address of the Senator from West Virginia.

Let me say to the Senator that even if our numbers are small on Tuesday, his efforts have not been wasted. They will serve a very useful purpose in the days to come.

I am proud to be able to claim him as a friend, one who has shown such high motivation and such a distinguished effort in the preparation of the analysis.

Mr. BYRD of West Virginia. I shall always treasure the compliments of the distinguished senior Senator from Georgia. I consider him to be a great U.S. Senator, a great southerner, and a great American.

Mr. RUSSELL. I thank the Senator.
Mr. MONRONEY. Mr. President, I
join my colleagues in the Senate, although I shall vote on the other side of
the issue, in complimenting the distinguished Senator from West Virginia on
his thorough and well documented and
enlightened discussion of this very serious problem which all Members of the
Senate face on next Tuesday in making
their decision on how to vote on the test
ban treaty.

Mr. BYRD of West Virginia. I thank the able senior Senator from Oklahoma.

Mr. GOLDWATER. Mr. President, I take this opportunity to thank and congratulate the distinguished Senator from

West Virginia for what I believe to be one of the most forceful arguments against approval of the treaty that it has been my pleasure to hear on the floor of the Senate.

Mr. BYRD of West Virginia. I thank the Senator from Arizona.

Mr. President, I yield the floor.

Mr. President, I ask unanimous consent to have printed in the Record the first 14 pages of the interim report of the Preparedness Investigating Subcommittee of the Committee on Armed Services of the Senate.

The PRESIDING OFFICER. Is there objection to the request by the Senator from West Virginia? The Chair hears none, and it is so ordered.

(See exhibit 1.)

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent to have printed in the Record a memorandum on significant dates in atomic weapons development and subsequent negotiations.

The PRESIDING OFFICER. Is there objection to the request by the Senator from West Virginia? The Chair hears none, and it is so ordered.

(See exhibit 2.)

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent to have printed in the Record "Alert No. 5, Soviet Treaty Violations," published by the Armed Forces Information and Education Institute, Department of Defense, November 5, 1962.

The PRESIDING OFFICER. Is there objection to the request by the Senator from West Virginia? The Chair hears none, and it is so ordered.

(See exhibit 3.)

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent to have printed in the Record an article from the Sunday Star of September 15, 1963, entitled "How the Soviets Are Observing Their Treaties."

The PRESIDING OFFICER. Is there objection to the request by the Senator from West Virginia? The Chair hears none, and it is so ordered.

(See exhibit 4.)

EXHIBIT 1

INTERIM REPORT ON THE MILITARY IMPLICA-TIONS OF THE PROPOSED LIMITED NUCLEAR TEST BAN TREATY

I, INTRODUCTORY STATEMENT

Since September 1962, the Preparedness Investigating Subcommittee has engaged in a comprehensive and extensive inquiry into the military and technical implications and aspects of the various nuclear test ban proposals.

Although the inquiry was originally directed to the entire field of nuclear test ban proposals from the standpoint of their potential impact upon our military posture and preparedness, the negotiation and signing of the three-environmental nuclear test ban agreement in Moscow caused the subcommittee to focus attention on the potential impact of that treaty upon the future of our Military Establishment and strategic forces.

This interim report is directed specifically to the partial test ban agreement. It deals with the military advantages and disadvantages to the United States which flow or might flow from the agreement. Political considerations, and matters involving foreign and international affairs, as such are not within the scope of this report.

In considering the impact and effect of the proposed test ban it is important to remember that for nearly two decades this Nation has been confronted by an adversary who has openly and repeatedly proclaimed that this dominant goal is to destroy the nations of the non-Communist world. Only because we have maintained clear military superiority and the ability to inflict unacceptable damage upon him has the would be aggressor been deterred. The basis of our deterrence is military superiority which, in turn, is based on our nuclear weapons programs and nuclear retaliatory forces.

It is vital to our survival that no step be taken which in any manner would impair the integrity and credibility of our deterrence or degrade the ability of our military forces to protect our security if we should be challenged militarily by a hostile nuclear power.

II. BACKGROUND AND SCOPE OF REPORT

The chairman of the subcommittee, in opening the hearings on September 17, 1962,

"The Senate Committee on Armed Services has legislative responsibility for the common defense generally and for matters affecting the size, composition, and equipage of the Armed Forces. It has a direct and legitimate interest in any and all activities which affect or may affect the development and procurement of weapons and the size and quality of our fighting forces."

He also said:

"Since weapons development and testing go hand in hand, we will inquire into the status of our nuclear test activities with respect both to weapons developments and weapons effects. Technical data now available on this question will be considered as well as information relating to our position in this field as compared with the progress of the Soviets."

In the months that have followed the subcommittee has made an exhaustive effort,
on a scope and scale which is believed to be
unprecedented as far as the Congress is concerned, to obtain complete and full information about the relationship of nuclear testing—in all environments—to the integrity of
our deterrent forces and the ability of our
retallatory or second-strike forces to survive
and respond to a nuclear attack. During the
hearings thus far 2,800 pages of testimony
were received from the 24 witnesses who are
listed in alphabetical order in appendix A.
Most of this testimony involved highly technical discussions relating to the needs and
capabilities of our present and future nuclear
weapon systems.

The overall objective of the subcommittee in this inquiry has been to develop as impartially, as objectively, and as fully as possible all available military and technical information bearing upon the subject matter so as to insure that the Senate would have available to it essentially the same body of military and technical evidence as is available to the executive branch of the Government in its formulation of nuclear test ban policies and in its weighing of their security implications. This objective has, we believe, been attained. The military, technical, and security problems associated with suspensions of nuclear testing have been identified, explored, and assessed. These problems will be discussed in this report with particular emphasis upon their relation to the treaty banning nuclear tests in the atmosphere, outer space, and underwater.

III. SUMMARY OF MAJOR FINDINGS

1. From the evidence we are compelled to conclude that serious—perhaps even formidable—military and technical disadvantages to the United States will flow from the ratification of the treaty. At the very least it will prevent the United States from providing our military forces with the highest qual-

ity of weapons of which our science and technology is capable.

2. Any military and technical advantages which we will derive from the treaty do not, in our judgment, counterbalance or outweigh the military and technical disadvantages. The Soviets will not be similarly inhibited in those areas of nuclear weaponry where we now deem them to be inferior.

3. Admittedly, however, other important factors—such as foreign policy, international affairs, and relations with other countries—are relevant in an overall assessment of the treaty. These are not within the scope of this report. When they are considered, as they must be, each individual must reach his own judgment about the wisdom and desirability of the treaty on the basis of personal philosophy, past experience, current knowledge, and relative weight which he assigns to the various factors involved.

IV. COMPARISON OF U.S.-U.S.S.R. NUCLEAR WEAP-ONS PROGRAMS

In this section we will endeavor from the testimony we have received to compare the nuclear warhead knowledge and state of the art of the United States with that of the Soviet Union. This includes, of course, the important field of nuclear weapons effects.

The criteria we will use are the number of tests conducted within important yield ranges and the yield-to-weight ratio (the explosive energy released per pound of bomb) achieved in the test programs. We will compare the situation prevailing in 1958 prior to the moratorium and that prevailing today.

A. Multimegaton weapons capabilities

In 1958, at the onset of the 34-month nuclear test moratorium, the United States had conducted slightly more tests above 1 megation in yield than had the Soviet Union. Of these U.S. tests, one-fifth were in yield ranges above 10 megations. No tests had been conducted by the Soviet Union in this high-yield category. As a result of this experimental program, the United States held a clear superiority over the Soviet Union in the yield it could achieve in a given thermonuclear weapon throughout the range of deliverable weights.

Following the abrogation of the moratorium by the Soviet Union, the test and performance records altered drastically. In 1961 and 1962 the Soviet Union conducted in yields above 10 megatons twice the number of tests which had been conducted by the United States in that yield range throughout the history of its nuclear test program. The total number of Soviet tests above 1 megaton was approximately four times that conducted by the United States in the same period (1961-62). In terms of yield-to-weight ratios, the Soviet Union, as a result of its aggressive test program and its concentration on very large yield weapons, has demonstrated clearly superior performance in all yield classes above approximately 15 megatons where the United States has had no testing experience since 1954. It is also worth noting that the scientific witnesses were unanimous in expressing uncertainty about the particular designs employed by the Soviets, to achieve the results observed in their very high yield experiments.

B. Low-megaton and submegaton weapon capabilities

Below a few thousand pounds in weight and a few megatons in yield the evidence available to us indicates that the United States continues to hold a lead in weapon design and performance.

For a variety of reasons the United States has chosen to concentrate its development efforts on weapons yielding from a few megatons down to fractions of kilotons. Consequently, it probably continues to hold some advantage in design techniques over the Soviet Union in these areas and in the ability

to maximize the yield which can be achieved at a given weight and size or, alternatively, to package a given yield in a device of minimum weight and size.

However, the rate of testing below 1 megaton indicates that the Soviet Union is attempting to challenge seriously the U.S. lead in the lower yield weapon categories. to the 1958-61 moratorium the United States had conducted somewhat more than twice as many tests at yields below 1 megaton as had been detected in the Soviet Union. By the end of 1962 this ratio had dropped significantly. More important, the 1961-62 Soviet test series included more tests in this yield range than had been conducted in its entire program from 1949 through 1958. Even accounting for tests to assess the effects of explosions and tests to confirm the yield of stockpiled weapons, this constitutes impressive evidence that the Soviet Union has no intention of permitting U.S. superiority in weapon design and performance at yields below 1 megaton to go unchal-lenged. It is in this range of yields that the testing underground permitted by the treaty can be accomplished readily.

Furthermore, there is a serious question about the adequacy of our knowledge of the nuclear devices employed in the Soviet experiments in the lower yield range. Detection, indentification, and analytical capabilities are degraded at the lower end of this yield spectrum, particularly in the low and subkiloton area. Consequently, our confidence in any conclusions concerning the Soviet state of the art in weapons yielding up to a few kilotons is correspondingly low. While we believe that U.S. superiority extends to these very low-yield ranges, hard evidence on this point does not exist and. accordingly, we accept the judgment of our Atomic Energy Commission witnesses that while some intelligence exists on which to base an estimate of U.S.S.R. tactical nuclear capability, the dearth of information [does] not permit a comprehensive United States-U.S.S.R. comparison. [For] future developments a credible U.S.S.R. development capability can be made by assuming a capability similar to ours.

C. Weapons effects programs

Important as are programs associated with the acquisition of new or improved types of weapons, the advent of the missile age and the adoption of a second-strike or retaliatory strategic policy by the United States has elevated to a first priority tests to determine the effects of nuclear explosions on hardened missile sites and control centers, on reentry bodies in flight, and on radar, electronic, and communications systems. Of equal importance have become tests to determine what unique effects are produced by nuclear explosions in space, the atmosphere, and underwater so that the knowledge gained might be exploited for defensive purposes or our own weapon systems designed to resist them.

From the testimony before the subcommittee, it is clear that neither nation has conducted a weapons effects test program of sufficient size and complexity to resolve whatever doubts may exist about the adequacy of the design and the survivability of their nuclear weapon systems; nor has either tested sufficiently to fulfill the needs of their system designers and military planners.

However, the necessity and the motivation to conduct such experiments is clearly greater for the United States than for the Soviet Union. Since the early 1960's, the deterrent strategy of the United States has been based substantially on second-strike missile systems, that is, missile systems which can survive a massive first strike by a nuclear-armed enemy and still retain the ability to retailate in such force as to destroy the attacker. By the mid-1970's this Nation's nu-

clear deterrent will probably reside primarily in land, and sea based missile systems designed to achieve that degree of survivability. To date, only Polaris has been subjected to a full-scale system test, including the explosion of the nuclear warhead. Minuteman, Atlas, and Titan have never been so tested, nor have models of the base complexes of the hardened underground Minuteman and Titan systems been subjected to close-in high yield nuclear explosions to prove the adequacy of their design. While all of the military witnesses expressed reasonable confidence in the ability of these systems to fulfill their missions, it is clear that some unresolved questions exist and that the absence of adequate design and vulnerability data has necessitated radical overdesign, redundancy, and excessive development and construction costs. Only by atmospheric testing, can needed answers be obtained to the important unresolved ques-

However, there is one area of weapons effects knowledge in which the Soviet Union probably holds a distinct lead. By virtue of its large, multimegaton weapon tests, it is prudent to assume that the Soviet Union has acquired a unique and potentially valuable body of data on high-yield blast, shock, communications blackout, and radiation and electromagnetic phenomena which is not available to the United States. Furthermore, due to the absence of comparable experiments, the United States is not now in a position to evaluate realistically the military effectiveness of the Soviet 50-to-100-megaton terror weapons.

In the field of weapons effects experiments related to the design and development of an effective antiballistic missile (ABM) system the evidence, although less conclusive, indicates that the Soviet Union in 1961 and 1962 conducted a series of complex high altitude operations which, if properly instru-mented, could have provided substantial and important data on various types of radar blackout and nuclear effects. These Soviet experiments were clearly dictated by an ABM

development program.

The United States has conducted no experiments comparable in complexity to those Soviet operations and a disturbing number of the United States high-altitude-effects experiments which were conducted were compromised either by considerations unrelated to the technical objectives of the test program, by inadequate or faulty instrumentagram, by inadequate or raulty instrumenta-tion, or by operational inadequacies. Based on the testimony we have received, there can be little doubt but that the quantity and quality of information available to the United States on high altitude nuclear effects is in-adequate for the Nation's military needs.

V. UNITED STATES NEEDS FOR NUCLEAR TESTS

In assessing the merits of the treaty which is now before the Senate for ratification, it is important to understand the kinds and objectives of certain nuclear test programs which, in the opinion of the subcommittee and based on testimony received by it, would be desirable or necessary in any future U.S.

nuclear test programs.

The following chart summarizes the subcommittee's conclusions and distinguishes between selected test objectives which can be realized through underground test programs and those which could only be achieved through atmospheric testing.

Test objectives—Can or cannot be done under treaty:
Survivability and responsiveness of hardened site missife launch complexes to high yield nuclear explosions. No.

Response of hardened underground structures to blast and cratering from high yield surface burst nuclear weapons. No.

Response of hardened underground structures to ground motion. Yes.

Determination of missile warhead and nosecone vulnerability to nuclear explosions during atmospheric reentry. No.
Reduction of missile warhead and nose-

vulnerabilities to nuclear explosions. cone

Study of atmospheric and high altitude radar blackout phenomena. No.

Study of communications blackout phenomena from high yield nuclear explosions.

Full-scale operational tests of ABM systems. No.

Development of ABM warhead with maximum lethality and minimum blackout

properties. Partially.

Development of very high yield warheads, equal to or surpassing Soviet achievements.

Determination of very high yield nuclear weapons effects. No.

Determination of underwater nuclear weapon effects for improved antisubmarine warfare (ASW) systems. No.
Development of weapons requiring less

fissionable material than present designs.

Development of pure fusion warheads.

Development of reduced fallout weapons. Yes.

Full-scale performance and reliability tests of Minuteman and Titan missile systems. No.

Yield verification tests of stockpiled weapons up to approximately 1 megaton. Yes.
Yield verification tests of stockpiled weap-

ons above approximately 1 megaton. No Troop and crew training tactical exercises using nuclear weapons. No.

VI. MILITARY IMPLICATIONS OF TREATY

The primary objective of the hearings held by the subcommittee was to determine whether or not a suspension of, or limitation upon, nuclear testing would or could result in overall military and technical disadvantage for the United States. While the evidence leads us to the conclusion that the net result of the proposed treaty would be a military disadvantage, there was considerable divergence of opinion among the witnesses on the question of whether the disadvantage was acceptable from the standpoint of the Nation's security and whether the risks involved were acceptable on balance.

A. MILITARY DISADVANTAGES

military disadvantages associated The with the treaty which were discussed in testimony before the subcommittee were as follows:

1. The United States probably will be unable to duplicate Soviet achievements in very high yield weapon technology: Though U.S. weapons laboratories are capable of developing and stockpiling designs yielding greater than 50 megatons without further experimentation, their weight and size would be incompatible with any existing or programed missile delivery vehicle. It is within the capabilities of U.S. weapons laboratories to equal and to surpass the Soviet achievements, but to do so would require a number of atmospheric nuclear tests.

2. The United States will be unable to acquire necessary data on the effects of very high yield atmospheric explosions: Without such knowledge it is unlikely that a realistic assessment can be made of the military value of such weapons, or that plans can be formulated to protect military weapons systems against their use. The data possessed by the United States on high yield weapons effects are inadequate to permit confident extrapolations to the higher yield cate-

3. The United States will be unable to acquire data on high altitude nuclear weapons effects: Such data are important to the design of antiballistic-missile-system war-

heads and radars. Again, this is an area in which Soviet experiments may have provided them with greater knowledge than that now available to the United States. Throughout our hearings there was considerable dispute on this point. The treaty proponents ac-curately observed that the ABM warheads could be developed through underground testing and that development of acquisition and tracking radars was an electronics problem not directly dependent upon nuclear tests. It is clear, however, that the characteristics or specifications upon which such warhead design and development should be based are not sufficiently known and cannot be determined with confidence without additional high altitude effects tests. As the Atomic Energy Commission observed:

"While our knowledge of * * * blackout

phenomena provides some limited guidance in the determination of [ABM] warhead criteria * * * an optimized design could only be chosen after continued atmospheric testing. Whether or not significant gains will result, can be argued."

And again: [warhead] specifica-"The minimal [warhead] specifications * * * can be met within the framework of existing technology. [But, assuming that a minimal warhead will not be acceptable] testing both underground and in the atmosphere would be required to com-

plete the development." 4. The United States will be unable to determine with confidence the performance and reliability of any ABM system developed without benefit of atmospheric operational system tests: An ABM system will be required to function in the nuclear environment created both by its own defensive war-head explosions and those of the attacking Under such circumstances it is imenemy. portant to be as certain as possible that no element of the system possesses unknown vulnerabilities to nuclear effects. All electronics components of the ground arrays and missiles must function; the missiles must be capable of operating in the presence of nuclear, thermal, and blast effects; the war-heads must be resistant to nuclear radia-It is apparent that unless a system of such complexity is tested in its opera-tional environment, there will be a low level of confidence in its ability to perform the mission for which it was designed and pro-Many unknowns will arise in the duced. course of the ABM development program which can only be explored and satisfied through the medium of atmospheric and

high-altitude nuclear testing.
5. The United States will be unable to verify the ability of its hardened underground second-strike missile systems to survive close-in, high-yield nuclear explosions: (See the discussion under the heading of "Weapons Effects Program" on pp. 4 to 5 of

this report.)

6. The United States will be unable to verify the ability of its missile reentry bodies under defensive nuclear attack to survive and to penetrate to the target without the opportunity to test nose cone and warhead designs in a nuclear environment under dynamic reentry conditions.

7. The treaty will provide the Soviet Union an opportunity to equal U.S. accomplishments in submegaton weapon technology: There can be no doubt that a treaty limiting testing to an underground environment will tend to favor experimentation at the lower end of the yield spectrum. Economic factors will play a part since costs rise signifi-cantly with relatively modest increases in yield for underground tests. There are also testing limitations arising from the type of strata, geological uncertainties, and engimeering factors. Whether or not either the United States or the Soviet Union will choose to test underground at yields much greater than approximately 1 megaton is not known, In any case, it appears that the race for nuclear technological superiority will be confined to that area where the United States is believed to now hold a margin of superiority. The result, with time, will probably be the achievement of parity by the Soviet Union in this area without any equivalent opportunity for the United States to attain equality in very high yield weapon technology.

very high yield weapon technology.

8. The treaty will deny to the United States a valuable source of information on Soviet nuclear weapons capabilities: The results acquired from the analysis of radioactive debris generated by nuclear explosions has long been a basic source of intelligence on Soviet nuclear weapons programs. By driving Soviet testing underground, this intelligence will be denied the United States with the result that with the passage of time knowledge of the Soviet state of the art in weapons undergoing tests will be seriously degraded. The effect of the treaty will be to reinforce the difficulties already imposed on the United States by Soviet secrecy.

B. Counterarguments

A clear majority of the witnesses agreed that the treaty would result in military and technical disadvantages when compared with the increases in performance confidence and in the quality of weapon systems which would be derived from unlimited atmospheric testing.

It was stated, however, that it is characteristic of the experimental sciences that enough data is never available to satisfy the scientific search for knowledge. The testimony was unanimous that, except in the field of very high yield weapons, the United States today holds a clear and commanding lead in nuclear weapon systems over any one or any combination of notential enemies

or any combination of potential enemies.

This superiority was said to result from a larger and more diversified stockpile of nuclear weapons, by more numerous, varied, and sophisticated delivery systems, and by a greater capacity to produce nuclear materials, weapons, and delivery systems.

It was also asserted that a cessation of

It was also asserted that a cessation of atmospheric nuclear testing would in no case prevent qualitative improvements being made in our weapons systems which would flow from a vigorous nonnuclear technology. Some witnesses noted that potential improvements in missile accuracy and reliability would continue to be exploited. Some noted that uncertainties in ABM radar performance when confronted with the various forms of blackout induced by nuclear explosions could be compensated by the deployment of greater numbers and wider dispersal of the radars.

Uncertainties concerning reentry vehicle warhead vulnerabilities could be reduced by a factor of 2 or 3, based on present knowledge and without further testing, by straightforward engineering improvements, it was said.

Some witnesses noted that so far as any uncertainties which might arise about the survivability of second-strike missile forces were concerned, these could be compensated by additional redundancy in missile systems, by greater numbers of missiles, and by greater dispersal. It was also noted that U.S. war plans tend to be conservative concerning the percentage of the second-strike force surviving a nuclear attack and in estimating the number of warheads capable of reaching enemy targets and so provide adequate margin for error.

In summary, it was the contention of witnesses who supported the treaty that it will tend to stabilize the advantages which the United States now maintains in military nuclear superiority over the Soviet Union. While recognizing that doubts concerning the quality of some of our weapons systems do exist, they maintained that these doubts can be compensated by "brute force" techniques by which quantity is substituted for

quality at considerably greater cost to achieve approximately the same results in military system effectiveness.

It is interesting and sobering to note that, as we proclaim our nuclear superiority and our determination to maintain it, the Soviets do likewise. A dispatch from Moscow, dated August 30, 1963, quotes Red Star, the Soviet armed forces newspaper, as saying that Russia today possesses superiority in nuclear power "and has no intention of relinquishing it." Feed Star also said that, while the United States intends to continue underground testing, the hopes of the Pentagon of attaining any "advantage in nuclear power by means of these explosions are illusory." And on September 3, 1963, Marshal Rodion Malinovsky, the Soviet Defense Minister, wrote in Komsomolskaya Pravda that the Soviet Union can "prove its complete military superiority over the United States."

VII. PROPOSED SAFEGUARDS

The Joint Chiefs of Staff in testimony before the subcommittee identified a number of military disadvantages which, in their collective judgment, would flow from the treaty. However, their assessment of the desirability of the treaty was not based on military considerations alone. Their conclusions on the matter also reflected their judgment of the political and foreign policy advantages and disadvantages which would result from it. Their joint conclusion was that, on balance, the political and foreign policy advantages to be derived from the treaty outweighed the limitations which the treaty would impose on the Nation's weapon systems programs.

However, the Joint Chiefs qualified their support of the treaty by making their approval conditional on the effective implementation of four "safeguards" designed to reduce to a minimum the adverse effect the treaty would have on our weapon programs. On the basis of these safeguards Senator Jackson on August 14, 1963, offered a motion which was unanimously adopted by the subcommittee, and was subsequently approved by all members of the Senate Committee on Armed Services, requesting that the Joint Chiefs of Staff submit as soon as possible, and in any event prior to committee action on the treaty, a statement of the specific requirements to implement the safeguards proposed by the Joint Chiefs. Senator Jackson's motion, which sets forth the proposed safeguards in full, is attached as appendix B.

By a letter dated August 15, 1963, Senator

By a letter dated August 15, 1963, Senator RICHARD RUSSELL, chairman of the Committee on Armed Services, transmitted the Jackson motion to the Secretary of Defense, and requested a statement in response to the motion.

Responses to the motion were received from the Joint Chiefs and the Office of the Secretary of Defense on August 24, 1963. These responses are attached as appendix C.

The subcommittee considers it to be vital that, if the treaty is ratified, the recommended "safeguards" be implemented fully and that detailed and specific programs to so implement them be presented by the executive branch

The administration has expressed publicly its intent regarding the safeguards both in the responses to the motion by Senator Jackson and in other statements by the President, the Secretary of State, and the Secretary of Defense. Such statements are set forth in appendix D.

To permit the U.S. Senate to monitor the treaty safeguards it is necessary that the expressed good intentions be supplemented by definitive programs against which progress can be compared. At this time, we have not received details of testing, preparedness, and detection improvement programs which will permit the safeguards to be monitored in an effective manner. If the treaty is ratified

It is the intention of the Preparedness Investigating Subcommittee to monitor the implementation of the safeguards and it would also be our hope that other committees of the Congress having jurisdiction in these areas would cooperate in this important program.

However, we wish to emphasize that even the most rigorous and conscientious implementation of the JCS safeguards will not alter, modify, or reduce the military and technical disadvantages listed herein which will result from this treaty. No safeguards can provide the benefits of testing where testing is not permitted, nor can they assure that this Nation will acquire the highest quality weapon systems of which it is capable when the means for achieving that objective are denied.

VIII. DETECTION AND IDENTIFICATION

A brief word should be said about the problem of detection and identification in connection with the proposed treaty. "Detection" means a determination that an event has occurred without implying that it has been identified as a nuclear explosion. "Identification" means that an event is not only detected but that it is identified as a nuclear detonation.

During the previous negotiations on test ban treaties, the major controversy in this field has centered around the ability to detect, identify, and fix the location of underground explosions. The proposed three-environment treaty, by permitting underground testing, considerably reduces the problems involved in detection and identification but does not eliminate them entirely.

The capabilities of our verification system cannot be discussed in detail in an unclassified document. However, notwithstanding anticipated and programed improvements in the system, it will still possess both detection and identification "thresholds" below which clandestine testing is possible with a low probability of detection.

The yields at which clandestine tests may be conducted and probably escape detection will vary with altitude and geographical location, and some uncertainty exists in this field. There is also some controversy as to whether significant military advantages can be obtained by clandestine testing in the prohibited environments.

It is not the purpose of this section to explore these problems in detail. It is our purpose here to point out that, under the limited treaty, problems of detection, identification, and verification still remain although they are of a lesser order of magnitude than would be true of a treaty banning underground testing.

IX. CONCLUDING STATEMENT

From the extensive evidence presented to us, we have come to the conclusion that the proposed treaty banning nuclear testing in the atmosphere, underwater, and in space will affect adversely the future quality of this Nation's arms, and that it will result in serious, and perhaps formidable, military and technical disadvantages. These disadvantages, in our judgment, are not outweighted or counterbalanced by the claimed military advantages. At the same time, we are not convinced that comparable military disadvantages will accrue to the nuclear weapon programs of the U.S.S.R.

Looking at the matter from the military aspect and from the effect of the treaty upon our military preparedness and posture, we cannot escape being impressed with the testimony of Gen. Thomas S. Power, commander in chief of the Strategic Air Command, and Gen. Bernard A. Schriever, commander of the Air Force Systems Command, who addressed themselves to the problem exclusively from the military point of view. General Power, after stating that he did not think the treaty "is in the best interests of the United States," said:

"I feel that we have military superiority now, and I feel very strongly that this has resulted in a world that has been free from nuclear warfare. I have a lower confidence factor that we can and will maintain that military superiority under the test ban

General Schriever told the subcommittee that there "are definite military disadvan-tages" to the treaty and that, as a military man, he felt he could protect the country better without the treaty than with it.

Of course, the endorsement of the treaty by Gen Curtis E. LeMay, Chief of Staff of the Air Force, was considerably less than enthusiastic, and he testified that he probably would have recommended against the treaty had it still been in the proposal stage.

From the evidence we have learned that the Soviets have overtaken and surpassed us in the design of very high yield nuclear weapons; that they may possess knowledge of weapons effects and antiballistic missile programs superior to ours; and that under the terms of the treaty it is entirely possible that they will achieve parity with us in low yield weapon technology. These things are not grounds for complacency. We believe very strongly that Soviet secrecy and duplicity requires that this Nation possess a substantial margin of superiority in both the quality and the quantity of its implements of defense.

Although we have concluded that there will be a net military disadvantage to us if the treaty is ratifled, we recognize the existence of other factors which, while not within the scope of this report, are pertinent to a final judgment on the treaty. Among these are matters related to international affairs, foreign policy, and relations with other coun-When these are taken into consideration the question becomes one of weighing relative risks, and our hearings provide ample evidence that the overall assessment of the relative merits and demerits of the treaty is felative merits and demerits of the treaty is a complex and difficult matter on which equally patriotic, informed, and dedicated persons may and do disagree. In the final analysis, then, each individual must reach his own judgment on the basis of personal philosophy, past experience, current knowledge, and the relative weight which he assigns to the various factors involved.

ADDITIONAL VIEWS OF SENATOR STUART SYMINGTON

Since 1955, when I was appointed a member of the Joint Subcommittee on Disarmament, I have followed closely the activity of our Government in arms control, disarmament, and nuclear test ban proposals; and specifi-cally have studied carefully the three-environmental test ban treaty signed by our Government in Moscow on August 5, 1963.

To the best of my knowledge, the factual data contained in the report of the Preparedness Investigating Subcommittee is correct. But I believe the findings and conclusions are overly pessimistic as to the effect of the treaty on our national security.

As a member of both the Foreign Relations

Committee and the Preparedness Investigating Subcommittee, I listened to and quesing subcommittee, I listened to and questioned many responsible witnesses—both in and out of Government. Most of these experts testified that our national security would be adequately protected under the terms of the treaty.

Much of this testimony was before the Foreign Relations Committee and, therefore, is not emphasized in this report.

Based on the record, I am worried about the treaty, but more worried about the possibility of an all-out nuclear exchange some only of an ant-out nuclear eachange some day in the future, particularly if there is a proliferation of nuclear weapons among more countries. This treaty, a very small step, nevertheless could be the first step toward bringing nuclear weapons under some form of satisfactory control, which action should promote the possibilities of a just peace under law

Therefore, I plan to vote for the treaty. This does not deter me from signing the Preparedness Investigating Subcommittee report. The record made by the subcommittee is, to the best of my knowledge, the most complete record ever made on this vital sub-ject by anybody on the military and technological implications of nuclear test ban treaties as they relate to our national secu-It is a record which should be of inestimable future value to the Congress and the country.

DISSENTING VIEW OF SENATOR LEVERETT SALTONSTALL.

As one Senator who attended the hearings conducted by both the Foreign Relations Committee and the Preparedness Investigat-ing Subcommittee on the proposed nuclear test ban treaty, I find that I cannot, as a member of the Preparedness Subcommittee, concur with its report because I feel that its general tenor and its specific findings conclusions are unduly pessimistic as to the effect of this treaty, if ratified, upon our national security. As a U.S. Senator, I intend to consent to the ratification of

this nuclear test ban treaty.

I believe that the factual data contained in the report of the Preparedness Subcommittee is accurately stated. However, the nature of the conclusions drawn from this factual data are, in my opinion, overly ad-It must be remembered that responsible Government officials such as the Secretary of Defense, the Joint Chiefs of Staff, leading scientists, and many others, some of whom appeared only before the Foreign Relations Committee, testified that our national security would be protected under the terms of the treaty even though some important atmospheric nuclear tests could no longer be conducted. This testimony is not sufficiently emphasized in the report, although I realize that some of it was not necessarily given in the hearings conducted by the Preparedness Subcommittee.

The Congress must insist upon an active, constructive, and energetic implementation of the four safeguards suggested by the Joint Chiefs of Staff so that our security will be maintained while the cause of peace and the lessening of tensions in the world are advanced.

EXHIBIT 2

SIGNIFICANT DATES IN ATOMIC WEAPONS DE-VELOPMENT AND SUBSEQUENT NEGOTIATIONS DATES OF CERTAIN NUCLEAR WEAPONS EXPLOSIONS

July 16, 1945: First U.S. nuclear device test, Alamogordo, N. Mex.

August 6, 1945: First atomic bomb dropped on Hiroshima,

August 9, 1945: dropped on Nagasaki. 1945: Second atomic bomb

September 23, 1949: President Truman announced the first atomic explosion in the USSR

October, 1952: First nuclear bomb test by

the United Kingdom in Australia.

November 1, 1952: Exploded hydrogen device fired at Bikini by United States.

August 21, 1953: First hydrogen device tested by U.S.S.R. detected by United States (Not included.)

October 30, 1958: Last U.S. test before moratorium. (Not included hereafter.) November 3, 1958: Last Soviet test before oratorium. (Not included hereafter.)

moratorium. February 13, 1960: First French atomic test. (Not included hereafter.)

September 1, 1961: Soviets resume atmospheric nuclear weapons tests.

September 15, 1961: United States resumes underground nuclear weapons tests. April 25, 1962: United States resumes

atmospheric tests. DATES OF NEGOTIATIONS ON DISCONTINUANCE OF NUCLEAR WEAPONS TESTS

June 14, 1946: U.S. proposal for international control of atomic energy (Baruch plan).

June 19, 1946: U.S.S.R. proposed alternate plan including insistence on retention of security council veto power over any control system.

March 24, 1957: Bermuda Declaration-Joint declaration by United States and United Kingdom to conduct nuclear tests in such manner as to keep world radiation from rising to more than a small fraction of the level that might be hazardous, to continue to announce test series, also expressed willingness to announce tests to the U.N. and permit international observation if the U.S.S.R. would do the same.

November 14, 1957: General Assembly Resolution 1148 (XII): Regulation, limitation, and balanced reduction of all armed forces and all armaments; conclusion of an international convention (treaty) on the reduction of armaments and the prohibition of atomic, hydrogen, and other weapons of mass destruction. Among its provisions, this resolution urged the immediate suspension of testing of nuclear weapons with prompt installation of effective international control, including inspection posts equipped with appropriate scientific instruments located in the United States, the Soviet Union, and the United Kingdom and at other points as re-

December 10, 1957: Soviet proposal that U.S.S.R., United States, and United Kingdom discontinue all tests as of January 1, 1958.

March 31, 1958: Decree of the Supreme So viet concerning the discontinuance of Soviet atomic and hydrogen weapons tests.

April 28, 1958: President Eisenhower by letter to Khrushchev proposed that both nations have the technical experts start to work on the practical problems involved in disarmament, particularly working toward the suspension of nuclear testing. President Elsenhower stated "I reemphasize that these studies are without prejudice to our respec-tive positions on the timing and interdependence of various aspects of disarmament,'

May 9, 1958: Letter from Khrushchev accepting Eisenhower's proposal of April 28, 1958, to have experts study the problems involved in an agreement on the cessation of atomic and hydrogen weapons tests as far as inspection and control are concerned.

July 1, 1958: Conference of experts from the West (United States, United Kingdom, Canada, and France) and East (U.S.S.R., Czechoslovakia, Poland, and Rumania) met

August 21, 1958: Conference of experts adopted a final report for consideration by governments. Conference of experts recommended the so-called "Geneva system" of detecting nuclear explosions. This system recommended a network of 180 control points. It should be noted that the American representatives during this conference. can representatives, during this conference, had taken the position that 650 control points would be necessary to have adequate protection down to 1 kiloton. Through compromise with the Soviets, they settled on the 180 stations, but then had to point out the weakness between the area of 1 kiloton and 5 kilotons.

August 22, 1958: President Eisenhower announced that based on the conference of experts' report, the United States was prepared to negotiate an agreement with other nations which have tested nuclear weapons for suspension of nuclear weapons tests and the establishment of an international control

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The President also indicated that avstem. the United States would withhold further testing on its part of atomic and hydrogen weapons for a period of 1 year from the beginning of the negotiations unless testing is

resumed by the Soviet Union.
October 31, 1958: First meeting in Geneva of the Conference on the Discontinuance of

Nuclear Weapon Tests.

November 4, 1958: General Assembly Resolution 1252 (XIII): The discontinuance of atomic and hydrogen weapons tests. Among its provisions, this resolution urged the parties involved in the test-ban negotiations not to undertake further testing of nuclear weapons while these negotiations are in progress. It expressed the hope that the progress. It expressed the hope that the Geneva Test Ban Conference would be successful and lead to an agreement acceptable to all. It also requested the parties con-cerned to report to the General Assembly the agreement that might be the result of their negotiations; and requested the Secretary-General to render such assistance and provide such services as might be asked for by the Conference commencing at Geneva on October 31, 1958.

November 7, 1958: President Eisenhower announced that the United States had detected additional tests by the Soviets subse-

quent to October 31, 1958.

December 28, 1958: The President appointed a panel on seismic improvement to review technical problems and to recommend

methods of improving seismic detection.

January 5, 1959: United States released data showing many underground tests could not be detected by Geneva experts system recommended in 1958. Indicated Geneva system applicable at 20 kiloton rather than 5 kiloton threshold.

February 22, 1959: Macmillan meeting with Khrushchev.

March 2, 1959: During this meeting Macmillan and Khrushchev discussed the establishment of quotas for number of on-site inspections in countries where suspicious

events have taken place.

April 13, 1959: United States proposed phased testing ban limited in first phase to atmospheric tests below 50 kilometers, with simplified control system, if Soviet Union continued to insist on veto for on-site inspections.

April 23, 1959: Soviets reject U.S. proposal to stop only atmospheric tests and said numerous on-site inspections would not be

necessary for complete ban.

June 22, 1959: Technical Working Group No. I met in Geneva to study high altitude detection problems.

July 10, 1959: On July 10 Geneva Technical Working Group I proposed establishment of system of earth satellites and installation of additional equipment at control and state of the state trol posts to detect high-altitude explosions.
August 26, 1959: United States extended

unilateral suspension to end of 1959. August 27, 1959: United Kingdom said it would not resume tests as long as Geneva negotiations showed prospect of success. August 28, 1959: U.S.S.R. pledged not to

resume testing unless Western powers did

November 21, 1959: General Assembly Resolution 1402 (XIV): Suspension of nuclear and thermonuclear tests:

Among its provisions this resolution expressed the hope that the countries involved in the test ban negotiations at Geneva would intensify their efforts to reach an agreement at an early date; it further urged the countries concerned in these negotiations to continue their voluntary ban on testing nuclear weapons; it also requested the countries concerned to report to the General Assembly the results of their negotiations.

November 25, 1959: Technical Working Group II met in Geneva with the Soviets and the British. This group met to consider data from the Hardtack series of nuclear

explosions and the findings of the Berkner Panel. On December 18, 1959, at the conclusion of the meetings held by Technical Working Group II, U.S. members of Geneva Technical Working Group II reported that a large number of seismic events could not be identified without onsite inspection, even with improved techniques. The Soviet members of Geneva Technical Working Group II disagreed with U.S. findings.

December 29, 1959: United States said it was free to resume testing after end of 1959 but would not do so without giving advance notice.

February 11, 1960: United States proposed phased agreement, first phase to provide for cessation of tests in atmosphere, oceans, and outer space, to greatest height that could be effectively controlled; underground tests above 4.75 seismic magnitude (estimated by United States to equal explosion of about 20 kilotons) would also be covered; the 4.75 threshold would be lowered as capabilities of detection system were improved, 20 or 30 per-cent of unidentified seismic events above threshold should be inspected; U.S. experts estimated that this would mean about 20 inspections per year in U.S.S.R.

March 19, 1960: Soviets offered to conclude treaty on cessation of tests, together with moratorium on underground tests below magnitude 4.75, and to agree to joint research program on understanding that weapons tests would be halted during program.

March 29, 1960: United States and United Kingdom said they would agree to voluntary moratorium on underground weapons tests below magnitude 4.75 after treaty was signed and arrangements were made for coordinated research program.

December 20, 1960: General Assembly Resolution 1577 (XV): Suspension of nuclear and thermonuclear tests.

This resolution urges the countries involved in the Geneva test ban negotiations to seek a solution for the few remaining questions so that a test ban agreement can be achieved at an early date; it further urges the countries concerned in these negotiations to continue their present voluntary suspension of the testing of nuclear weapons; it also requests the countries concerned to report the results of their negotiations to the Disarmament Commission and the General Assembly.

March 21, 1961: First meeting under the new administration of the Geneva Conference on Discontinuance of Nuclear Weapons Tests. U.S. proposal presented by Ambassador Arthur H. Dean. Soviet Union introduced its Troika proposal on this date.

April 18, 1961: United States and United Kingdom introduced draft treaty to the

Geneva Conference.

May 5, 1961: Statement by President Kennedy on the Geneva test ban negotiations made at his news conference. Mention is made of the new United States and United Kingdom proposals and the introduction of

the Troika proposal by Russia.

June 4, 1961: Khrushchev delivers Soviet aide-memoire concerning disarmament and nuclear weapons tests to President Kennedy at Vienna. Insists that the question of control hinges on Western Powers accepting proposals on general and complete disarma-

June 6, 1961: Kennedy reports to American people on his Vienna talks with Khrushchev. June 16, 1961: Khrushchev reports to Russian people on his talks with President Ken-(Tass report) Topics covered: General and complete disarmament, banning of nuclear weapons, cessation of tests, question of control, Hammarskjold, the German question (peace treaty).

June 17, 1961: U.S. aide mémoiré to Soviet Russia concerning Geneva test ban negotiations. Repeated new proposals offered by the United States and the United Kingdom on March 21, 1961.

June 28, 1961: President Kennedy announces appointment of Committee of Scientific Experts to advise him on test ban problem.

July 15, 1961: Soviet note replying to U.S. note of June 17, 1961, concerning suspension of nuclear weapons tests. Says Soviet proposals have been distorted. Brings up again supervision of inspection and control by equal representatives of three basic groups: Socialist states, capitalist states in Western military bloc, and neutral states (troika).

July 15, 1961: U.S. note to Soviet Union referring to the Soviet note of July 5, 1961, on the Geneva test ban negotiations. Says Soviet note contains a multitude of irrelevant and unwarranted comments. Confines its reply to the central issue: Is the Soviet Union prepared to reach an accord which would halt nuclear tests under effective international control.

July 15, 1961: United States and United Kingdom request to U.N. to place on the agenda of the 16th General Assembly an item entitled: "The Urgent Need for a Treaty to Ban Nuclear Weapons Tests Under Effective International Control."

July 20, 1961: President Kennedy announces membership of nuclear test study

August 10, 1961: President announces he has reviewed report of Scientific Committee and is sending Ambassador Dean back to Geneva.

August 30, 1961: Soviets announce plans

to resume nuclear testing.

Among the reasons cited by the Soviets for taking this step were the turndown of the Troika" proposal, the nuclear tests carried out by the French beginning February 13, 1960, and the Berlin situation.

August 30, 1961: White House statement on the Soviet's announcement that they planned to resume nuclear testing.

This statement expressed concern and resentment in regard to the Soviet decision to resume nuclear testing. It added that the Soviet decision presented a threat to the entire world. It denounced the Soviet pretext for resumption of weapons testing by mentioning that the Berlin crisis was created by the Soviets themselves. It also mentioned that the Soviet Union bears heavy responsibility before all humanity for this decision which was made in complete dis-regard of the United Nations. It concluded by announcing that Ambassador Arthur Dean was being recalled immediately from his post as chief negotiator at the nuclear test ban meetings.

September 1, 1961: The White House reported that the Soviet Union had conducted a nuclear test in the atmosphere above central Asia. Authorities estimated that the device had a yield of 100-500 kilotons.

September 3, 1961: President Kennedy, in joint statement with British Prime Minister Macmillan, proposed that the Soviet Union agree immediately to discontinuing testing nuclear weapons in the atmosphere. The note suggested that the United States, United Kingdom, and U.S.S.R. representatives meet in Geneva not later than September 9 to record the agreement to cease nuclear testing in the atmosphere and report it to the United Nations.
September 4, 1961: Soviet Union conducted

its second nuclear test in the atmosphere over central Asia. This explosion was reported to be in the "low kiloton range."

September 5, 1961: Soviet Union detonated a third nuclear device. The yield of this detonation was in the low to intermediate range.

September 5, 1961: President Kennedy announced that the United States would resume nuclear testing. He ordered the tests carried out in the laboratory and underground "with no fallout." This decision was made after the Soviets set off their third

nuclear test in the atmosphere in 5 days. President Kennedy, in referring to the Kennedy-Macmillan statement of September 3 on banning nuclear testing in the atmosphere, said the offer remains open until September 3. tember 9, 1961.

September 15, 1961: The United States detonates its first underground nuclear device at the Nevada test site. October 27 1961: The United Nations Gen-

October 27 1961: The United Nations General Assembly adopted a resolution which "solemnly appeals to the Government of the Soviet Union" to refrain from testing a 50-megaton bomb. Premier Khrushchev has said such a bomb will be exploded before the end of this month. The vote was 87 to 11, with 1 abstention.
October 30, 1961: The Soviet Union deto-

nated a 55-60 megaton device (per AEC re-

lease dated Dec. 9, 1961).

November 2, 1961: The President announces that the policy of the United States will be to proceed in developing nuclear weapons to maintain a superior capability for the defense of the free world against any aggressor. This statement indicated that the United States would make necessary preparations for testing in case it becomes necessary to test in the atmosphere.

December 22, 1961: A joint communique was issued by President Kennedy and Prime Minister Macmillan following a 2-day meeting in Bermuda. They agreed that it was necessary "as a matter of prudent planning for the future, that pending the final decision [to resume atmospheric testing]." Preparations should be made for atmospheric testing to maintain the effectiveness of the deterrent. was issued by President Kennedy and Prime

January 29, 1962: Geneva Conference on the Discontinuance of Nuclear Weapons Tests breaks up at 353d meeting. The United States proposed an adjournment, and Soviet negotiator Tsarapkin said, "This is the end."

February 7, 1962: President Kennedy and British Prime Minister Macmillan said they have proposed to Soviet Premier Khrushchev that another "supreme effort" to halt the nuclear arms race be made by raising next month's 18-nation general disarmament con-

month's 18-nation general disarmament conference to the Foreign Minister's level.

February 14, 1962: President Kennedy urged Premier Khrushchev not to press his proposal for an 18-nation summit meeting on disarmament. However, he assured the Soviet leader that he was ready to participate that the was ready to participate. "at any stage of the conference when it appears that such participation could positively affect the chances of success."

February 21, 1962: Premier Khrushchev replied to President Kennedy's letter of February 14 still insisting on a summit confer-

ence on disarmament.
February 24, 1962: Letter from President Kennedy to Premier Khrushchev. President Kennedy to Fremier Knrushchev. Fresident Kennedy replied to Premier Khrushchev's letter of February 21, 1962, stressing that heads of state participation at the Geneva Conference should be reserved until a later stage in the negotiations after preliminary agreements have been reached at the Foreign

Minister's level.

March 2, 1962: President Kennedy announced that he had ordered a resumption of nuclear tests in the atmosphere in late April unless the Soviet Union agrees before then to an ironclad treaty banning all tests. The President field out to Khrushchev the promise of a summit conference at which such a treaty could be signed, and also said that a satisfactory treaty would be offered by the West at the disarmament conference opening in Geneva on March 14, 1962.

March 4, 1962: The Soviet Government sent the United States a message delivered to the State Department advising that For-eign Minister Gromyko would go to Geneva. The Kremlin message was reported to have said that Khrushchev had "reluctantly" ac-cepted the foreign minister proposal.

March 14, 1962; Seventeen-nation disarmament conference opened in Geneva. (Originally 18-nation conference, but France did not attend.)

March 16, 1962: Premier Khrushchev announced that Soviet scientists had developed a "global rocket," invulnerable to antimissile weapons and that it rendered obsolete the early warning system of the United States

April 10, 1962: The White House released joint United States-United Kingdom statement on nuclear testing appealing to the Soviet Union to agree to a nuclear test ban with adequate safeguards including the principle of international verification. This statement indicated that if such an agreement was not successful then the test series scheduled by the United States for the latter part of April would go forward.

April 10, 1962: Prime Minister Macmillan

added a personal message to the joint Anglo-American note to Premier Khrushchev on a nuclear test ban asking him to accept an inspection procedure and "fill all the peoples of the world with a new sense of hope."

April 12, 1962: Premier Khrushchev rejects the Kennedy-Macmillan joint statement on nuclear testing.

April 16, 1962: Eight neutral nations appealed to the nuclear powers to persist in their efforts to reach agreement on pro-hibiting nuclear weapons testing for all time. They suggested establishing a system for continuous observation and control on a scientific and nonpolitical basis, built on existing national network of observation posts.

April 18, 1962: United States offered a three-stage plan for disarmament, having as its goals general and complete disarmament and gradual replacement of the armed power of single nations by a strengthened United Nations. The disarming process would be balanced to prevent any state from gaining a military advantage, and compli-ance with all obligations would be effectively

April 22, 1962: Joint Committee on Atomic Energy in summary analysis of 1961 Vela hearing, reports that nearly 3 years of research had brought no material progress toward an effective method of detecting clandestine underground tests.

April 25, 1962: First 1962 U.S. nuclear test

in the atmosphere. This test was of an intermediate yield from a plane near Christ-mas Island. The President approved the resumption of nuclear testing after repeated unsuccessful attempts by the United States to get the U.S.S.R. to agree to a nuclear test ban treaty with adequate safeguards.

April 26, 1962: Secretary of State Rusk justified the new series of tests on the basis of refusal of the Soviet Union to accept the kind of international verification necessary for a test ban agreement. The Secretary of State referred to President Kennedy's address of March 2 in which he set forth the reasons why a certain number of tests would be necessary in the absence of an international agreement banning nuclear tests with adequate assurances; and, secondly, that it is a major objective of American policy to bring an end to testing immediately and permanently when we were assured that testing had been abolished.

May 1, 1962: France conducts underground explosion of nuclear device in Algerian Sa-

May 2, 1962: Disarmament talks were resumed at Geneva. British Minister of State Joseph Godber said U.S.S.R. must change its attitude toward verification measures if the world is to have general and complete disarmament.

May 16, 1962: Premier Khrushchev confirmed U.S.S.R. determination to test. based his decision on the fact that the United States had resumed testing in the Pacific.

June 14, 1962: The 18-Nation Disarmament Conference 1 recesses.

July 12, 1962: Secretary of State Dean Rusk reports that the preliminary Vela results, released by the Defense Department on July 7, offer some promising signs for detecting and identifying nuclear tests but emphasized the new findings cannot be considered a substitute for control posts or onsite inspections.

July 13, 1962; Soviet Union served official notice that it claims the right to be the last nation to carry out nuclear weapon tests.

July 16, 1962: The 18-Nation Disarmament

Conference reconvenes in Geneva. The United States proposes discussion of scientific findings, particularly from Project Vela. July 21, 1962: The Soviet Government an-

nounces its decision to resume nuclear tests. August 1, 1962: President Kennedy stated at his news conference that on the basis of recent technical assessments, the United States can work toward an internationally supervised system of detection and verification for underground testing which will be simpler and more economical than the system which was contained in the treaty which we tabled in Geneva in April 1961. He emphasized that these new assessments do not

August 5, 1962: The Soviet Union detonates a nuclear explosion in the atmosphere in the order of magnitude of 30 megatons. This is the first of some 40 tests, continuing until December 25.

affect the requirement that any system must

include provision for onsite inspection of unidentified underground events.

August 8, 1962: U.S. Delegate Dean proposed reducing the number of control posts to something like 80—a reduction of more than half. He offered this concession in view of his contention that detecting devices have gone ahead rapidly. Thus, our techniques for detecting sneak tests are much better. August 9, 1962: Ambassador Dean formally

introduces a new proposal for a comprehensive test ban treaty based on a worldwide network of internationally supervised, nationally manned control posts. Provided the Soviets agree to the principle of obligatory onsite inspection, the numbers of control posts and onsite inspections would be substantially reduced from previous U.S. propos-Ambassador Zorin immediately rejects the new proposal.

August 20, 1962: The U.S.S.R. rejected proposals for a partial nuclear test ban treaty. The idea of a half-way treaty was advanced by Brazil, Sweden, and Italy. The proposed treaty would stop atmospheric tests immedi-ately to ease fallout dangers. August 27, 1962: The United States and

Great Britain offered the Soviet Union the choice of an internationally inspected total ban on nuclear weapons tests or an unin-spected limited ban. The limited ban would cover tests in the atmosphere, in space and underwater pending further negotiations for a treaty to include underground tests, the most difficult to identify.

August 29, 1962: The U.S.S.R. submitted

to the disarmament conference a formula for halting nuclear weapons tests that the United States and Britain have repeatedy termed unacceptable because of inadequtae guarantees and safeguards for inspection of suspicious events.

August 29, 1962: President Kennedy welcomed a Soviet proposal that all nuclear testing cease by January 1. But he reiterated the Western position that an enforcible treaty, complete with inspection provisions, be signed first.

September 7, 1962: The 18-Nation Disarmament Conference recesses, but the test ban subcommittee remains in session.

¹ 18-Nation Disarmament Conference now composed of 17 nations. France, an original member, withdrew at the beginning of the Conference.

September 19

negotiator at the Disarmament Conference

October 24, 1962: At the United Nations, Brazil proposes denuclearization of Latin America and Africa which would include a ban on nuclear weapon tests in these con-

November 4, 1962: President Kennedy announces the end of the current series of atmospheric nuclear tests, but states that underground tests will be continued in Ne-The last atmospheric detonation was November 4, 1962.

November 6, 1962: The General Assembly adopts a two-part resolution on nuclear tests. Part (A), sponsored by 37 powers and approved by a vote of 75 to 0 with 21 abstentions, calls for the cessation of testing by January 1, 1963, and an interim arrangement with certain assurances if no final agreement is achieved by that date. Part (B), spon-sored by the United States and the United Kingdom and approved by a vote of 51 to 10 with 40 abstentions urges the early conclusion of a comprehensive test ban treaty with effective international verification. The United States and the U.S.S.R. abstain on part (A), and the U.S.S.R. opposes part (B).
November 13, 1962: At Geneva, Ambassa-

dor Tsarapkin suggests that unmanned seismic stations be employed as an addition to existing national detecting stations to monitor a test ban.

November 26, 1962: The 18-Nation Disarmament Conference reconvenes for the third

November 28, 1962: In an attempt to end the deadlock at Geneva, Swedish Delegate Rolf Edberg proposed a moratorium on all nuclear tests while an international group of scientists works out underground control methods satisfactory to both the West and the Soviet Union.

December 3, 1962: The U.S.S.R. rejected the proposal for setting up a nuclear test ban put forth by the Indian-Swedish delegations.

December 4, 1962: The Soviet Union told the United States and Great Britain that as long as they insisted on on-site inspection there would "never be any agreement" to end nuclear testing. Joseph B. Godber, of Britain, declared the dismissal of the neutralist efforts to break the test ban stalemate was "not the action of a responsible govern-

December 4, 1962: Arthur H. Dean told the Soviet Union that unmanned seismic stations—the so-called "black boxes"—cannot serve as sole guardian of a nuclear test ban.
December 10, 1962: In the 18-Nation Dis-

armament Conference, Ambassador Tsarapkin formally proposes the establishment of two or three unmanned seismic stations on the territories of states possessing nuclear weapons. Locations by zones for those to be placed in the Soviet Union are named. This proposal is conditioned on the abandonment by the West of its insistence on international

control and obligatory on-site inspection.

December 19, 1962: Premier Khrushchey,
in a letter to President Kennedy, states that the Soviet Union is now prepared to accept two or three onsite inspections per year on Soviet territory. In addition, he says there could be three unmanned seismic stations on Soviet territory. The final location of the stations is left open.

December 20, 1962: The 18-Nation Disarmament Conference recesses.

December 28, 1962: President Kennedy, in reply to Premier Khrushchev, indicates encouragement that the Soviets have now accepted the principle of onsite inspection, but states that the figure of "two or three" onsite inspections is not sufficient, nor are three unmanned seismic stations. He denies that the United States offered to agree on three inspections. The United States has reduced number of onsite inspections to 8 to 10.

January 4, 1963: Arthur H. Dean announced that he had submitted his resigna-tion on December 27, 1962, as Chief U.S. at Geneva.

January 7, 1963: In a letter to President Kennedy, in further exchange on the subject of onsite inspection, Premier Khrushchev holds to his contention that an annual quota of two or three inspections is sufficient. He emphasizes that he considers agreement in principle a great unilateral concession, and he agrees to further discussion on the questions between United States and U.S.S.R. representatives.

January 14, 1963: United States and Soviet representatives meet in New York. The United States is represented by Whilam C. Foster, Director of the U.S. Arms Control and Disarmament Agency; and the U.S.R. is represented by N. T. Fedorenko, Soviet Ambassador to the U.N., and S. K. Tsarapkin, chairman of the Soviet delegation to the 18-Nation Disarmament Conference. Discussions continue in New York until January 22 when they are moved to Washington. January 26, 1963: President Kennedy

orders that preparations for underground testing in Nevada be suspended in the hope that the Western-Soviet discussions presently taking place in New York and Washington would materially enhance the prospects for an effective agreement on a test ban.

February 1, 1963: The New York and Washington, D.C., discussions on a test ban are slated to be taken up at the 18-Nation Disarmament Conference scheduled to be resumed on February 12. In a press conference, Secretary of State Rusk expressed the disappointment of the United States that the position of the Soviet Union appeared to have hardened into a take-it-or-leave-it attitude on their offer for two or three on-site inspections per year. The Secretary states, "* * * the idea of onsite inspection is not simply a political question involving the acceptance of onsite inspection in principle, but is the practical problem of establishing arrangements which in fact do provide assurance that agreements are being complied with."

February 1, 1963: President Kennedy or-ders resumption of the preparations for underground testing in Nevada. February 8, 1963: The scheduled series of

underground tests is begun in Nevada. February 12, 1963: The 18-Nation Disarm-

ament Conference reconvenes at Geneva. February 22, 1963: The ACDA announces in Washington that the United States is willing to consider possible acceptance of seven on-site inspections, providing the modalities of inspection can be agreed upon.

February 28, 1963: In a Moscow election meeting speech, Premier Khrushchev reaffirms his refusal to consider anything but three on-site inspections per year.

April 1, 1963: The United States and

United Kingdom delegations table a memorandum of position concerning the cessation of nuclear weapons tests. This memorandum sums up the Western position on general principles of agreement, on-site inspection and automatic seismic station arrangements, and includes specific proposals submitted to date.

May 13, 1963: AEC and DOD announce cancellation of the three small subkiloton de-tonations which had been announced on May 8 would be conducted at the Nevada Test Site on the surface and one just below the surface.

May 27, 1963: Senator Dodd joined by 33 other Senators introduced a resolution that U.S. offer to the Soviet Union to agree to a ban on all tests that contaminate the atmosphere or the oceans.

June 10, 1963: President Kennedy, in his speech at American University, announced that: (1) he, Prime Minister Macmillan and Chairman Khrushchev had agreed that high level discussions will shortly begin in Moscow on a comprehensive test ban treaty;

(2) the United States does not propose to conduct nuclear tests in the atmosphere so long as other states do not do so.

June 20, 1963: Memorandum of Understanding (between U.S. and U.S.S.R.) signed at Geneva to establish a direct communications link between the United States and the Soviet Union. (This was negotiated in

arms control forum).

June 30, 1963: The Atomic Energy Commission reported that in recent weeks there has been evidence of events in the Soviet Union which may be nuclear tests of very low yields. (Newspaper articles referred to an event occurring in the Soviet Union on June

July 2, 1963: Chairman Khrushchev, in a speech in East Berlin, agrees to negotiate on a nuclear test ban treaty limited to atmosphere, outer space, and underwater. He also requested negotiations on a nonaggression pact between NATO and the Warshaw Treaty nations.

July 15, 1963: Commencement of three power (United States, United Kingdom, and U.S.S.R.) talks in Moscow to negotiate a

July 25, 1963: Negotiators for the United States, United Kingdom, and U.S.S.R.—Ambassador Harriman, Lord Hailsham, and Foreign Minister Gromyko—initial a treaty to ban nuclear weapons tests in other nuclear explosions in the atmosphere, in outer space, and underwater.

Ехнивит 3

[Alert No. 5—Soviet Treaty Violations, published by Armed Forces Information and Education, Department of Defense, Nov. 5,

SOVIET TREATY VIOLATIONS

Officials of the Soviet Union, from the 1917 Bolshevik revolution onward through 45 years of Communist rule, have established an undisputed reputation for breaking their most solemn pledges.

The Soviet regime's consistent viewpoint on the relative unimportance of promises is not restricted to its dealings with other countries, but extends with equal force to its relationships with the Russian people and the various minority groups which comprise the U.S.S.R.

Only 3 days after the November 7, 1917. revolution placed it in nower, the Communist regime abolished freedom of the press as a privilege too dangerous to be entrusted to the people. The people were promised, however, that the decree would be rescinded just "as soon as the new regime took root." This 45-year-old promise notwithstanding, the order still applies today.

Other instances in which the Soviet Republic has broken faith with its own people are legion. The revolution of 1917 was carried out in the name of democracy, and ever since "democracy" has been one of the most frequently used words in the Commu-nist lexicon. But while the Communists have capitalized on the word, they have radically altered its definition-from "government by the people" to "government for the good of the workers." Since the Communists keep for themselves the right to determine what is "good" for the workers, the Soviet definition of democracy in fact has become "government by Communists."

After 1917, the Russian people wanted not only democracy but its specific institutions: a constitution, a parliament, elections, a secret ballot, trade unions, etc. They were given all these things, but in name only.

The Soviet Constitution is an interesting document to read. However, it is violated or ignored by the regime as a matter of course. The Soviet parliament meets regularly, but it possesses neither power nor function. Elections are held every 4 years, but the single-slate ballot gives the voters no choice.

A "secret ballot" is provided, but its purpose is to identify dissenters rather than protect

ş

V. I. Lenin: "Promises are like pie crust, made to be broken." subservient to his only to

one's hand by entering into an agreement actions—otherwise what kind of diplomacy criminal to tie relation J. V. Stalin: "Words have no of any permanence with anybody. "It would be mad and That promises mean next to nothing to the Communist official mind has been admitted

A RECORD OF BROKEN PROMISES

Trade unions flourish; but

worker more

employer, the state.

by Soviet leaders

3

G. E. Zinoviev (first head of the Communist International): "We are willing to sign possible than dry water or wooden iron." are a mask Good words bad deeds.

for concealment of an unfavorable peace—it would only mean are one thing, actions another. Sincere diplomacy is no more

that we should put no trust whatever in the piece of paper we should sign."

The following list shows how well the Soviet leaders keep their promises when it no longer The Soviet Communist regime has entered into hundreds of international agreements. appears to be in their interest to do so.

April 25, 1943: U.S.S.K. breaks relations with Polish government-in-exile on pretext of Polish request for Red Cross investigation, of Katyn Forest masses.....

Czechoslovakia, Tannu Tuva, Afghanistan Union's record of occupation and domination Lithuania, territory, Hungary, East Germany, Albania, Bulgaria, Poland, North Korea, Mongolia. Against these promises stands of Rumania, Estonia, Latvia,

Soviet Union refused to withdraw its troops from Iran at the end of World War II.

roles as In violation of this agreement stands the U.S.S.R.'s record of domination in Bulgarla, countries Hungary, which were forced into postwar Rumania, Poland, East Germany, and other satellites of the Soviet Union. Czechoslovakia, and

participate in meeting with Britain and United States to secure compliance with the 1945 agreement pledging free elections in January 5, 1947: Soviet Union refuses

Communist-controlled ditions of Soviet military occupation. September 29, 1949: Soviet Union de-nounces this agreement. election carried out under con-January 19, 1947: fraudulent Poland.

ing all land and water routes between Berlin and West Germany. Western Allies supply Berlin by airlift. March 1962: Soviet Union harasses flights by Allied airplanes between Berlin and West Germany. April 1, 1948 to May 12, 1949: The Soviety Union imposes the Berlin blockade by sever-

be a rigidly controlled Soviet satellite. Its people have been denied free elections, isolated from the people of West Germany, and victimized rule, and economic restrictions imposed on the peoples of all the Soviet bloc states in by the same kind of regimentation, police East Germany today continues to

it had helped create. The Soviets did not even bother to change the basic wording. The new treaty also pledges: "Both high conment with the Communist Chinese regime broken when the U.S.S.R. made a new agree-February 14, 1950:

tornial changes not made in accord with freely expressed wishes of the people concerned, and that they respect the right of all peoples to choose their own form of governvides that agreeing countries seek no aggranpledges adherence to Atlantic Charter, which prodizement, that the countries desire no terri-1941: Soviet Union September 24,

May 26, 1927: Britain ends agreement because of Soviet violations, including fallure

March 16, 1921: In trade agreement with Britain, Soviet Union pledges not to engage in propaganda in that country.
June 5, 1922: Soviet Union concludes

treaty

Soviet regime signs

with independent Georgian Republic, pledging no interference in Georgia's internal af-

and Britain signs treaty of alliance, providing for military use of Iranian territory only until end of military operations against January 29, 1942: Soviet Union, with Iran

liberated peoples of Europe should have the opportunity to solve their economic problems including adoption of a resolution that the U.S.S.R. agrees on various postwar measures, by democratic means. February

February 11, 1945: U.S.S.R., at Yalta Conference, agrees to declaration that Polish provisional government "shall be pledged to the holding of free and unfettered elections as soon as possible on the basis of universal suffrage and secret ballot."

April 11, 1945: U.S.S.R. signs 20-year treaty friendship, mutual aid, and cooperation

June 14-18, 1945: President Truman and Premier Stalin agree, in an exchange of letters, to "free access by air, road, and rail from Frankfort and Bremen for U.S. forces." bу ij.

Conference, U.S.S.R. agrees that there should be uniform treatment of the German people throughout Germany.

ing these pledges: "Each high contracting party undertakes not to conclude any alliance and not to take any part in any coalition directed against the other high conto August 14, 1945: The Soviet Union enters

July 30, 1941: U.S.S.R. concludes agreement Polish govexnment-in-exile, pledging mutual aid and cooperation.

ment.

4-11, 1945: At Yalta Conference, Germany.

with Yugoslavia.

February 11 and 12, 1921: Soviet troops invade Georgia, in step leading to absorption of republic into U.S.S.R.

to stop propaganda as promised. June 29, 1945: U.S.S.R. compelled Czechoto cede Carpatho-Ukraine to the Govern-

Soviet Union.

Czech

December 12, 1948: U.S.S.R. and Czech Government-in\extle sign treaty of friendship

mutual assistance

and

friendship agreement with Czechoslovakia.

slovakia

tum, as Soviet Union completes arrangements to force country into its satellite empire. ment forced to accept Communist ultima-February 25, 1948: Czechoslovak

net of Moscow followers and climaxes Soviet Ultimatum compels appointment of a cabipostwar drive to absorb once-independent Czechoslovakia.

March 20, 1945: U.S.S.R. denounces this pact, begins campaign to secure control of Black Sea straits. June 14, 1946: U.S.S.R. forces Afghanistan June 15, 1940: Soviet troops invade Lithto cede border territory of Kushka.

Soviet Union violates this pledge by 1939-40 invasions of Poland, Lithuania, Latvia, Estonia, Rumania, and Finland.
November 30, 1939: Soviet military forces invade Finland. August 3, 1940: Lithuania is annexed by Soviet Union. uania.

September 27, 1928; Soviet Union adheres

tending this agreement through 1945.

to Kellogg-Briand pact for renunciation

January 21, 1932; U.S.S.R. agrees to non-

February 5, 1932: Soviet Union signs non-

aggression pact with Finland. aggression pact with Latvia.

June 16, 1940: Soviet troops invade Latvia. August 5, 1940: Latvia is forcibly incorpo-June 16, 1940: Soviet military forces ade and occupy Estonia.

August 6, 1940: Estonia is annexed rated in the U.S.S.R. vade and

September 17, 1939: Soviet troops invade Germany to partition Po-1939: U.S.S.R. September 29, ment with Nazi U.S.S.R. Poland.

> nonnon-

signs

Soviet Union

1932:

25,

aggression pact with Poland. May 5, 1934: U.S.S.R.-Poland extend

aggression pact for 10 years. June 9, 1934: U.S.R. reguarantees her sovereignty.

pact with Poland

May 4, 1932: Soviet Union pledges nonaggression in agreement with Estonia.

manian Provinces of Bessarabia and Northern June 27, 1940: Soviet Army invades Ru-Bukovina. Soviet occupation of these areas completed in 4 days.

> September 15, 1934: U.S.S.R. enters League nance of justice and a scrupulous respect for

Nations, pledging thereby "the maintenall treaty obligations in the dealings of orga-

recognizes Rumania,

independence and territorial integrity.
October 2, 1949: U.S.S.R. breaks relations
with Republic of China, after recognizing
Communist Chinese regime it helped to gain August 23, 1939: U.S.S.R. makes treaty with Nazi Germany, termed "a joint conspiracy" to deprive Poland, Estonia, Latvia, Lithuania, Finland, and Fumania of their

Union signs non-

aggression pact with Republic of China.

nized peoples with one another."
August 21, 1937: Soviet Union s

into treaty with Republic of China, containing these pledges: "Each high contracting party undertakes not to conclude any alli-

... Approved For Release

August 31, 1926: Soviet Union concludes September 28, 1926: Soviet Union makes nonaggression pact with Lithuania, later ex-

nonaggression pact with Afghanistan.

December 17, 1925: U.S.S.R. signs nonag-

gression and neutrality pact with Turkey.

THE AGREEMENT

tracting party * * *. The treaty comes into force immediately * * * and shall remain in force for a term of 30 years."

March 10, 1947: Council of Foreign Ministers, meeting in Moscow, agrees that all German prisoners of war should be repatriated by December 31, 1948.

May 4 and June 20, 1949: Four-power agreements of New York and Paris guarantee United States, British, French, and Soviet joint control of Berlin, all access routes to and from the city, and freedom of movement within the city.

July 27, 1953: Military armistice established between United Nations command and opposing Communist forces, assisted by U.S.S.R., of China and North Korea. Armistice agreement pledges signers to "cease introduction into Korea of reinforcing military personnel."

January 14, 1956: U.S.S.R. signs agreement with Yugoslavia, pledging \$110 million in credits for industrial construction.

August 4, 1956: U.S.S.R. pledges an additional grant of \$175 million, bringing total to \$285 million.

October 19, 1956: U.S.S.R.-Japanese joint declaration pledges the Soviet Union to refrain from interference in Japan's internal affairs.

tracting parties undertake not to conclude any alliance against the other high contracting party and not to take part in any coalition or actions or measures directed against the other high contracting party * * *. The present treaty will be valid for 30 years.

August 3, 1955: Soviet regime furnishes West German Red Cross with data on the health and whereabouts of only 20 of the approximately 14,000 Germans known to be still held in the U.S.S.R.

September 20, 1955: U.S.S.R. unilaterally transfers Soviet control over all access routes

to and from Berlin to East German regime.
August 13, 1961: Construction of Berlin wall completely prohibits free passage from the Soviet sector to the Western sectors.

July 11, 1955: U.N. command details long list of armistice agreement violations by Communist parties.

May 6, 1957: U.N. command, in another of series of official complaints, charges that Communists have sent troops in Korea's demilitarized zone six times in period of less than 4 months.

May 28, 1958: Yugoslav sources disclose that the Soviet Union has postponed for 5 specified the Soviet Onion has postponed for a years the grant to Yugoslavia amounting to \$285 million. This represented an attempt to retaliate against Yugoslavia for its refusal to accept the Soviet Communist Party's ideological leadership.

1958: During the weeks preceding Japanese elections of May 22, Soviet radio beams propaganda at Japan violently opposing the reelection of Premier Kishus government.

1959-60: U.S.S.R. threatens Japan with the possibility of nuclear war if Japan ratifles United States-Japan security treaty, signed January 19, 1960.

ber 19, 1956 (provisions on repatriation of Japanese nationals)

Agreement concerning repatriation of Japanese prisoners of war and civilians from the U.S.S.R. and from territories under Soviet control, as well as Korean nationals from Japan to Soviet-occupied North Korea, with two annexes. December 19, 1946.

2. Treaties between the RSFSR and certain bodies concerning establishment of autonomous republics within the RSFSR. Such autonomy on several occasions was unilaterally abrogated at a later date by the RSFSR.

3. Treaties of nonintervention: U.S.S.R. frequently has violated such treaties outright, or has denied that activities in which it was engaged constituted an intervention within the meaning of the treaty. Intervention by the U.S.S.R. has constituted both of propaganda and political warfare, and of outright political or military activities. Examples are:

Exchange of notes between the U.S.S.R. and Rumania constituting an agreement concerning noninterference in each other's internal affairs, June 9, 1934.
Exchange of notes between the U.S.S.R.

and France concerning Soviet adherence to the principle of nonintervention in the Spanish civil war.

Joint declaration by the U.S.S.R. and Japan concerning political relations October 1956 (provisions on noninterference in internal affairs).

4. Treaties related to the International Labor Organization. U.S.S.R. has adhered to conventions on a variety of subjects: Child labor, right to unionize, annual holidays with pay, freedom of association, etc. Some of these agreements were first drawn in the early 1920's. Examples are:

A TREATY TECHNIQUE

The U.S.S.R., on occasion, attempts to play off one country against another through the negotiation or drawing of treaties, of which one set tends to be deceptive. In 1922, the U.S.S.R. negotiated with the Western Powers, only to sign the Treaty of Rapallo with Germany. In 1939, extensive discussions with France and England on mutual security were terminated through the signing of the Nazi-Soviet Pact. Agreements made in 1939 with Nazi Germany on the division of Poland were annulled 2 years later by treaty with the Polish Government-in-exile; in addition, the U.S.S.R. shortly thereafter drew agreements, which were not mutually compatible with

two different Polish exile governments. The U.S.S.R. has signed agreements which have a purpose that differs from the objects stated in the treaty. The U.S.S.R., for example, joined the United Nations for many reasons connected with their strategy of revolution, but not for the humanitarian reasons stated in the U.N. Charter.
In summary, it may be concluded that in

the Soviet scheme, treaties are a tool either to solve some practical problem (Danube River navigation or International Postal Union Treaties) or, more importantly, to further the offensive-defensive strategy of the U.S.S.R. More often than not, treaties are concluded with a particular country whose assent or benevolent neutrality is needed to carry out a particular strategic operation, or else the treaty partner is itself the intended victim, or target, of Soviet direct or indirect

TREATIES VIOLATED

1. Treaties pertaining to repatriation and treatment of civilians and war prisoners. whole series of such treaties was made after

World War II. Examples are:
Joint declaration by the U.S.S.R. and
Japan concerning political relations, Octo-

CONVENTION ON SLAVERY

Convention concerning slavery of 1926-53, U.S.S.R. ratified August 1956. Several supplementary conventions of 1956 on abolition of slavery and slave trade "and institutions and practices similar to slavery" ratified by the U.S.S.R.

Convention concerning equal remunera-tion for men and women workers for work of equal value (ILO convention No. 100), rat-

ified by the U.S.S.R. on April 4, 1956.
Convention concerning forced or compulsory labor (ILO convention No. 29) of 1930— 3. U.S.S.R. ratified June 4, 1956.
5. Treaties pertaining to the control of

narcotics. These are violated by the U.S.S.R. through proxies (China, Cuba). Examples

International Opium Convention, with annex and protocol, February 19, 1925. Soviet adherence, October 31, 1935.

Convention for limiting the manufacturing and regulating the distribution of narrotted days with protocol of signature. Like

cotic drugs, with p otocol of signature, July 31, 1931. Soviet adherence, October 31, 1935.

6. Treaties establishing certain rules or regulations, or prohibiting certain practices. These either have been or are being violated by the U.S.S.R.; they are antithetical to Soviet custom and observation of such agreements canont be expected. The U.S.S.R. was not a signatory to some of these treaties before World Way II. and Went authorized to the such a signature of the such as the such before World War II, and went out of its way to act contrary to the spirit of many of the provisions. Examples are:

Geneva convention concerning the treatment of prisoners of war, with five annexes, 1949. Supersedes agreements of 1929.

Geneva convention concerning the protection of civilian persons in time of with three annexes, 1949.

Convention on the prevention and punishment of the crime of genocide, December 9,

Convention on the political rights of women, December 20, 1952, and March 31, 1953.

EXHIBIT 4

[From the Washington (D.C.) Star, Sept. 15, 19631

How the Soviets Are Observing Their TREATIES NOW

(By Dr. F. G. Lassner)

The following is a short study of selected Soviet treaty practices. It is not based on a comprehensive listing of all treaties; nor does this study contribute a complete analysis of how treaties fared at the hands of the Kremlin. However, a large enough sample of treaties was examined to permit a number of broad conclusions.

Economic treaties, in general, are being observed by the U.S.S.R. This is so because treaties of this sort operate to the advantage of the U.S.S.R. and because many of them are drawn with Communist bloc states; i.e., they are treaties within the same political entity. But where trade agreements conflict with the immediate political interests of the U.S.S.R., they are wholly or partially voided (viz, treaties with such dissident satellites as Albania, China, Yugoslavia, etc.).

Many treaties signed by the U.S.S.R., especially at the end of World War II, called for free elections or plebiscites. The U.S.S.R. presumably expected Communist and affiliated parties to win elections in Eastern Europe. When this hope was disappointed, despite systematic attempts to bring about electoral victories by skulduggery (e.g., outlawing of certain parties), political warfare and insurrectional methods were used to seize political power.

Treaties of strategic significance habitually have been violated by the U.S.S.R. whenever violation was in accord with the requirements of Soviet strategic operations. This will become apparent by reading, for example, the attached list of violated and observed nonaggression and friendship treaties.

At that time believe I had fully covered this point. However, I see that my distinguished colleague from West Virginia [Mr. Byrd] in his discussion today again has referred to General Powers' concern and cites General Powers' statements as one of the bases for his con-cern over the treaty.

For many years now the Joint Committee on Atomic Energy has had de-tailed information concerning the testing program by the AEC and the high degree of reliability that the AEC and the weapons laboratories attribute to their nuclear weapons. The details of this on file with the Joint Committee are classified. In order, however, to bring this matter to the attention of the public in a true light, the Joint Committee staff on September 17 requested Gen. A. W. Betts, Director of the Division of Military Application, to make available in an unclassified manner the details of the testing programs and the assurances as to the reliability of the nuclear weap-ons. This afternoon a response from General Betts was received at the office of the Joint Committee on Atomic Energy.

I ask unanimous consent that the letter of September 17 from the Joint Committee on Atomic Energy to General Betts and the reply from General Betts of September 19 be inserted in the Rec-

I believe the Commissioner's letter signed by General Betts will once and for all put to rest any doubts that exist.

There being no objection, the letters were ordered to be printed in the RECORD, as follows:

SEPTEMBER 17, 1963.

Maj. Gen. A. W. Betts,
Director, Division of Military Application,
U.S. Atomic Energy Commission, Wash-Ú.S. Atomic ington, D.C.

DEAR GENERAL BETTS: On August 19, 1963, General Power, in testimony before the Preparedness Investigating Subcommittee of the Senate Committee on Armed Services, testi-

"The only way you can prove a weapon system is to take it out of the stockpile in a random pattern and let the tactical unit take it out and detonate it. If you haven't done this, there is always a chance that something has happened that we won't discover until too late. * * *
"We have not tested any of the operational warheads in our inventory. That includes the missiles and the bombs."

The implications left by General Power's testimony is that the weapons systems and warheads developed are not assured of functioning properly when called upon to do so in an operational manner. From the knowl-edge available to the Joint Committee in following the weapons programs over the years, this appears to be contrary to the actual situation.

Most of the information on file with the Joint Committee on Atomic Energy regarding this matter is in classified form. very desirable, therefore, that an unclassified letter be furnished recounting the long history of looking at the need for operational systems tests, and the study efforts made on this problem together with the procedures now in practice which provide to scientists, engineers and to the military advisers in the Department of Defense the high degree of confidence they have in the assurance that complete weapons systems, when fired operationally, will result in nuclear warhead detonations as designed.

To the greatest extent possible in an un-

classified communication, this letter should include information on tests of weapons systems that included warheads where the entire sequence of firing was actually tested except for the final nuclear detonation. Statistical tests and certification procedures involving more than just the original war-head designers should also be described.

Your cooperation in providing us this information is greatly appreciated.

Sincerely yours,

JOHN T. CONWAY, Executive Director.

U.S. Atomic Energy Commission, Washington, D.C., September 19, 1963. Mr. John T. Conway, Executive Director, Joint Committee on Atomic Energy,

Congress of the United States

DEAR MR. CONWAY: I refer to your letter of September 17, 1963, regarding statements made by Gen. Thomas S. Power, commander in chief, Strategic Air Command, before the Preparedness Investigating Subcommittee of Committee on Armed Services, U.S. Senate.

The matter of reliability of nuclear weapons has always been considered a matter of great importance by the Atomic Energy Commission and consequently a substantial technical effort has been devoted to insure that the nuclear weapons provided to the Departthe nuclear weapons provided to the Department of Defense will function properly if used operationally. The required reliability for any particular nuclear weapon is established initially by the DOD in the nuclear weapon military characteristics. This required reliability is quite high and is verified by the extensive testing program discussed. by the extensive testing program discussed in the following paragraphs.

The accumulation of the necessary data upon which the reliability is based begins early in the development program of a weapon. Initially the nonnuclear components are subjected to many rigorous tests, under various environmental conditions which include acceleration, vibration, high and low temperature cycling, etc. Next, the complete nonnuclear weapon (either bomb or warhead) with depleted uranium or other material substituted for the fissionable material is tested under a variety of circumstances that include functional tests under simulated operational conditions. In these tests, the weapon is highly instrumented in order to obtain information that is of primary interest to the weapon designer; e.g., arming, fusing, and firing circuit operation. If the weapon is a bomb, it is carried by the same type aircraft that will employ it operationally and it is released on an AEC test range at Tonopah, Nev., where extensive ground instrumentation records all the various bomb functions.

In the case of a ballistic missile, the same type of tests are run in conjunction with the DOD on test firings from the Atlantic or Pacific missile ranges. These tests confirm the compatibility between the DOD and AEC portions of the weapon system and establish that the nonnuclear portion of the weapon will perform according to specifications. A sufficient number of these tests is performed so that a statistically signifificant amount of data is obtained thus allowing the reliability of the system to be certified as meeting the DOD requirement.

The above tests are generally performed on development quality material. After the results of these tests are analyzed and the designs are firmly established several complete nuclear weapons are produced by the production complex using production tooling.
These nuclear weapons are again subjected to essentially the same sorts of tests as the development hardware, although no actual missile firings or aircraft drops are performed. After successful completion of these tests quantity production of a weapon is begun and it is introduced into stockpile.

During the production phase the quality and reliability of the product continues to be of prime importance. For this reason, weap-ons are withdrawn very early in the production phase in order to perform functional tests thereby establishing the quality of the new production. Additionally, throughout the stockpile life of the weapon, nuclear weapons are periodically withdrawn on a statistical basis and functional tests performed. In this way, the reliability of the stockpile is continuously verified and any degradation resulting from the passage of time is detected and corrected.

In regard to the nuclear portion of the system, the designer performs development tests on high explosive detonators, high explosive charges, initiators, and other components to establish reliability data. By the use of various testing techniques the nuclear weapon designer is able to predict with a high degree of confidence that the weapon would have performed in a satisfactory manner had the nuclear materials been present.

To supplement the extensive development tests of primarily nonnuclear components mentioned above, full scale nuclear development and proof tests are performed. The development tests lead to an optimum design that may be tested further by a proof test. The decision as to whether a proof test will be performed depends primarily on the design approach, the success of the develop-ment tests, and sensitivity of the system to variations in weapon yield. The designs of most of the weapons in stockpile have been proof tested.

In addition to the AEC tests the DOD performs operational suitability tests of the complete weapon system using weapons provided by the AEC. The weapons provided to the DOD for this purpose are essentially identical to stockpiled weapons (less the nuclear material). The operational suitability test is designed to evaluate the system from stockpile to target and generally culminates usually there are several of these tests performed for each weapon system. In some instances a passive (nontelemetered and recoverable) instrumentation package is installed in these weapons to provide a record of proper functioning of various weapon circuits. In other tests the data are telemetered.

In regard to operational tests of complete systems, this has been a matter primarily of concern to DOD, although AEC advice and assistance have been provided. As you know, the decision has been made in some instances to perform operational systems tests such as the Polaris weapons system test during Operation Dominic.

In summary we are confident that the nuclear weapons the AEC develops, produces, and provides to the DOD are highly reliable and that they will function properly if used operationally.

Sincerely yours,

A. W. BETTS, Major General, U.S. Army, Director of Military Application.

Mr. LAUSCHE. Mr. President, since the treaty in a limited way to ban nuclear testing was submitted to the Senate, I, as well as other Senators, have been giving grave consideration to the course that should be followed by the Senate with respect to the proposal.

I approach this problem with the view that the achievement of peace and the maintenance of the security of the United States are our primary considerations. That is the premise upon which I have acted in attempting to decide what should be done.

Worthy people throughout the world do not believe in war, or the taking of the lives of citizens because of political differences, or in the practice of enter-

ARMISTICE AGREEMENTS

7. Armistice agreements and/or peace treaties after World War II contained many provisions violated by the U.S.S.R., especially in treaties with the present satellite countries. The U.S.S.R. also hampered Allied control commissions in carrying out their assignments. Examples of such provisions are: Free elections, noninterference in internal affairs, inspections, etc.

8. Some miscellaneous agreements wholly

or partially violated by the U.S.S.R.: Exchange of notes between the U.S.S.R.

and the United States concerning establishment of diplomatic relations, with related documents, November 16, 1933. (Provisions of this agreement, especially those in which signatories promise to refrain from certain activities have been violated.)

Joint declaration by the U.S.S.R. and Japan pledging respect for the territorial integrity and inviolability of Manchukuo and the

Mongolian Peoples Republic, April 13, 1941.

Agreement between the U.S.S.R. and the
United Kingdom providing for limitation of
naval armament and exchange of information concerning naval construction, with protocol of signature, July 17, 1937. Modification July 6, 1938. (U.S. changed any information.) (U.S.S.S.R. never ex-

November 16, 1937, (1) convention for creation of an International Criminal Court and (2) convention for prevention and pun-

ishment of terrorism.

Convention concerning privileges and immunities of the United Nations, February 13, 1946, U.S.S.R. accession September 22, 1953 (agreements on duties and privileges of diplomats frequently are violated by the U.S.S.R.).

Kellogg-Briand Pact, treaty of Paris, signed August 27, 1928, renunciation of war. Protocol concerning entry into force of the general treaty of August 27, 1928, for renunciation of war as an instrument of national policy (Litvinov protocol). February 9, 1929, U.S.S.R.-Estonia, Latvia, Poland, Rumania—later Lithuania, Danzig, Persia.
Commercial treaties with Albania and

China have been abrogated by the U.S.S.R. to a greater or lesser degree as a result of the political disagreements with these countries.

Agreements between the U.S.S.R. and the United States regarding return of lend-lease naval vessels.

Agreements between the U.S.S.R. and other Allied Powers on establishment of provisional government, holding of elections, etc., in Korea.

Agreement by the Allied Control Council for Germany concerning establishment of three corridors for air travel between Barlin and West Germany, November 30, 1945.

Neutrality, friendship, mutual assistance, and nonaggression treaties between the U.S.S.R. and other countries

Where the U.S.S.R. had a strategic goal or some immediate or long-range political objective, these treaties have been violated. When this was not the case, if the other contracting party was geographically removed from the U.S.S.R., or where treaties were drawn with other Communist states, the treaties in general have been observed.

TREATIES NOT VIOLATED

Treaty of friendship and neutrality between the U.S.S.R. and Turkey, with three protocols, December 17, 1925.

Treaty of neutrality and nonaggression between the U.S.S.R., and Germany, with exchange of notes, April 24, 1926, extended 1931.

Treaty of neutrality and nonaggression between the U.S.S.R., and Afghanistan, with final protocol, August 31, 1926, extended 1931, 1936, and 1955.

Treaty of friendship, nonaggression, and neutrality between the U.S.S.R., and Italy, September 2, 1933.

Gentlemen's agreement between the U.S.S.R., and the Mongolian People's Republic, concerning mutual aid in case of attack by a third party, November 27, 1934.

MUTUAL ASSISTANCE

Protocol of mutual assistance between the U.S.S.R., and the Mongolian People's Republic, March 12, 1936. Converted into treaty of friendship and mutual assistance, February 27, 1946.

Treaty of nonaggression between the U.S.S.E., and Germany, August 23, 1939, and secret protocol concerning spheres of interest in eastern Europe.

Treaty of friendship, collaboration, and mutual assistance between the U.S.S.R., and Rumania, February 4, 1948.

Treaty of friendship, collaboration, and mutual assistance between the U.S.S.R., and Bulgaria, March 18, 1948.

Treaty of friendship, collaboration, and mutual assistance between the U.S.S.R., and Finland, April 6, 1948.

Treaty of friendship, alliance, and mutual assistance between the U.S.S.R., and the Chinese People's Republic, February 14, 1950.

Treaty of friendship, cooperation, and mutual assistance (Warsaw Pact), May 14, 1955. U.S.S.E., Albania, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Rumania.

State Treaty for Austria, May 15, 1955, U.S.S.E., United Kingdom, United States, France, Austria. (Not an outright nonag-gression treaty, but Austria's status guaranteed by U.S.S.R.)

Violated:

(Note.—The nonaggression pacts with the three Baltic countries were violated by the U.S.S.R. when the latter, in June of 1940, sent each country an ultimatum demanding formation of a new government and the entrance of Soviet troops into major cities.)

Treaty of nonaggression between the U.S.S.R. and Lithuania, with two exchanges of notes, September 28, 1926. Extended 1931, 1934, reaffirmed by treaty of October 10, 1939.

Convention between the U.S.S.R. and

Lithuania concerning the definition of aggression, with annex, July 5, 1933.

Treaty of nonaggression and neutrality between the U.S.S.R. and Latvia, March 9, 1927, extended 1932 and 1934.

Treaty between the U.S.S.R. and Latvia on conciliation procedure, June 18, 1932.

Pact of mutual assistance between the U.S.S.R. and Latvia, October 5, 1939.

PACT WITH FINLAND

Treaty between the U.S.S.R. and Finland concerning nonaggression and the peaceful settlement of disputes, with protocol of signature, January 21, 1932. (U.S.S.R. expelled from League of Nations for violating this Extended 1934.

Convention between the U.S.S.R. and Finland concerning conciliation procedure, April 22, 1932,

Treaty between the U.S.S.R. and Estonia concerning nonaggression and the peaceful settlement of disputes, May 4, 1932, extended 1934.

Convention between the U.S.S.R. and Estonia concerning conciliation procedure, June 16, 1932.

Pact of mutual assistance between the U.S.S.R. and Estonia, September 28, 1939.

Treaty of nonaggression between the U.S.S.R. and Poland, with two protocols of signature, July 25, 1932, extended 1934.

Convention between the U.S.S.R. and Poland concerning conciliation procedure. November 23, 1932.

Joint communique by the U.S.S.R. and Poland concerning diplomatic and commercial relations, November 26, 1938. Confirms 1932 nonaggression treaty..

Note from U.S.S.R. to Poland abrogating existing treaties between the U.S.S.R. and

Poland, September 17, 1939. Reason: Polish Government has ceased to exist. Followed by joint declaration of friendship and mutual aid by the U.S.S.R. and the Polish government in exile, December 4, 1941

Treaty of nonaggression between U.S.S.R.

and France, November 29, 1932. Convention between the U.S.S.R. and France, concerning conciliation procedure, November 29, 1932.

Treaty of mutual assistance between the U.S.S.R. and France, with protocol of signature, May 2, 1935.

Treaty of mutual assistance between the U.S.S.R. and Czechosolvakia, with protocol of signature, May 16, 1935.

Treaty of friendship, mutual assistance, and postwar collaboration between the U.S.S.R. and the Czechoslovakian government in exile, with protocol, December 12,

WITH YUGOSLAVIA

Treaty of friendship, mutual assistance, and postwar collaboration between the U.S.S.R. and Yugoslavia, April 11, 1945. (Denounced by the U.S.S.R. September 28, 1949; in October, Yugoslavia accused the U.S.S.R. of having broken the treaty. Most commercial treaties between U.S.S.R. and Yugoslavia violated by the U.S.S.R. after the break in relations.)

Treaty between the U.S.S.R. and the United Kingdom concerning aliance in the war against Germany and collaboration and mu-tual assistance after the war, May 26, 1942. Annulled by U.S.S.R. on May 7, 1955.

Treaty of alliance and mutual assistance between the U.S.S.R. and the French provisional government, December 10, 1944 (annulled by U.S.S.R., May 7, 1955).

Pact of neutrality between the U.S.S.R. and Japan, April 13, 1941 (denounced by U.S.S.R. on April 5, 1945).

Treaty of friendship, collaboration, and

mutual assistance between the U.S.S.R. and Hungary, February 18, 1948 (violated as a result of Soviet actions in Hungary in 1956).

Treaty of nonaggression between U.S.S.R. and China, August 21, 1937.

Agreement concerning the evacuation of Soviet forces from Chinese territory after the capitulation of Japan, July 11, 1945.

Treaty of friendship and alliance between

the U.S.S.R. and China, August 14, 1945 (annulled by exchange of notes of February 14, 1950, between the U.S.S.R. and the Chinese People's Republic. Declared null and void by Government of Republic of China on February 25, 1953, the General Assembly of the U.N. accused the U.S.S.R. of violating this treaty).

Exchange of notes between the U.S.S.R. and China concerning relations between the U.S.S.R. and China, August 14, 1945. Supplements the above treaty, some clauses violated by the U.S.S.R.

Exchange of notes between the U.S.S.R. and China concerning Outer Mongolia, August 14, 1945 (calls for a plebiscite).

Additional agreements made about the same time (about Darien, Port Arthur, etc.), violated by the U.S.S.R. in fact or in spirit.

Exchange of telegrams between the U.S.S.R. and the Chinese People's Republic concerning establishment of diplomatic relations, October 1, 1949. (On same day, the U.S.S.R. informed Nationalist diplomatic representatives in Moscow that U.S.S.R. considered him to represent only the Province of Canton, and would break off relations. This appears to be how the U.S.S.R. rid itself of treaty obligations with Nationalist China.)

Mr. ANDERSON. Mr. President, on September 17 reference was made to General Powers' concern that ICBM nuclear weapons systems have not been fully tested.

ing into a solemn agreement without intending to fulfill it. I believe that is the spirit of the people of our country. At least it is mine.

How are we to attain the peace we all want? It certainly cannot be attained by yielding to the inordinate demands of Red Russia about the communization of the world, or by following a course in which the military might of Red Russia reaches a comparative level, so that Russia can dictate to the people of the free world what should or should not be done, or by wishful thinking that into the minds of Communist leaders has come a new light, and that now they yearn for peace and the legitimate coexistence of people of different political, economic, and social leanings.

In September 1938, Neville Chamberlain, Prime Minister of Britain, announced to the world the result of the agreement he had made with Hiller and Mussolini. With joy and pride he proclaimed, "peace in our time." Neville Chamberlain was a sincere, honest, and well-intentioned person. He believed that by the agreement he made with Hitler and Mussolini, he served not only the people of Great Britain but also the people of the world. But peace was not the lot of the world; instead, there came but genocide, tortures, and devastating

war.

Today we are faced with a similar situation. In the maintenance of peace, can we take the word of Red Russia? Can we believe that it will discontinue creating tensions around the world and will remain contented with the present distribution of the atomic bomb? In my judgment, we cannot. To the extent that communism has been contained and peace maintained, it has not been the result of the will of Red Russia but of the strength that we have had in the military. If our military power were not greater than that of Red Russia, peace would not now prevail throughout the world, even to the limited degree that it has. The Chiefs of Staff have said that if the treaty were signed, two things would happen: First, it would stop the proliferation of the bomb. Presently, two principal powers are in the process of achieving a bomb strength—France and Red China. Neither of those countries will sign the treaty.

The people of Ohio do not want the Senate to approve a compact with Red Russia that would endanger the future security of the United States; they do not want the honor of our country to be tarnished by agreeing to unreasonable and unjustifiable exactions demanded by any other government. They want peace with honor.

The other reason urged for signing the treaty is that it will stop tensions throughout the world. If we ascertain facts upon which we could conclude that tensions would be reduced, we find that every day Red Russia is provoking difficulties and tensions. What tensions have been reduced in South Vietnam, South Korea, in British Guiana, and in South America? What is Red Russia doing in Cuba, in Colombia, in Brazil, in Venezuela, and in Guatemala? Tensions are

being provoked everywhere. Red Russia will abide by its commitments only so long as it is suitable and advantageous for it to do so. The moment that suitability and convenience come to an end, it will do with the treaty what it has done with 53 out of the last 59 important agreements that it has made. Only a year ago Russia promised to the United States inspection in Cuba. That commitment still has not been kept.

We cannot take the word of Red Russia. The treaty is not conducive to the maintenance of peace. It is not in the interest of our country. It will rise to plague us. The time may come when we shall have to ask to be excused from it. When that time comes embarrassment and distress will be much greater than that which we now would face if we said to the 91 nations, including Ghana, Mali, Togo, the Cameroons, Dahomey and other nations that we have never heard of, "We cannot join you in signing the treaty because it would result in creating a condition that would bring Russia to supremacy in power." When Russia achieves supremacy in power, I have grave misgivings as to what will happen to our country.

Russia destroyed 20 million Russians. Tito put to death 1 million Yugoslavs. Everywhere communism, when it gains control, shows no mercy. It kills without limitation. That hour may come in our country if Red Russia ever attains supremacy. I shall vote against the treaty because I do not believe it is in the interest of peace and and in the interest of preserving high and secure our Government.

When I took my oath of office as a U.S. Senator I swore to uphold and defend the Constitution of the United States and to perform my duties to the best of my ability—that I contemplate doing and thus passing upon this important treaty unmindful of my own political consequences but thoughtful solely of the future life of my country.

ARE THE TERMS OF THE TREATY, IN VIEW OF

EXISTING CONDITIONS—POLITICAL AND MULITARY, CONDUCTVE TO PEACE AND ALSO THE SECURITY OF OUR COUNTRY?

If this question is answered in the affirmative, of course, the treaty ought to be supported—otherwise, not.

In analyzing the facts I will take up first the military phases of the problem. Generally it is admitted that Red Russia is in possession of a much greater rocket thrust than we are. In the last few years it has been putting into orbit payloads as high as five times greater than that which the United States was and is able to project. In addition the statement made by General Taylor is directly to the effect that technologically Red Russia is more advanced than we are in the high-yield range.

We try to find solace in the belief that the Soviets have no missile at this time which will deliver a hundred megaton warhead to a distant point within the United States. We have no proof that such a rocket booster is not possessed by Red Russia. If speculation is to be done in this field, it ought to be done resolving the doubt in the direction that

will offer the greatest security for our country and, that is, to assume that it does have or will have such a delivery system.

It is also practically conceded that under the terms of the treaty we will be stopped from developing large megaton weapons even though future disclosures indicate an absolute need for them.

Does anyone believe that if Red Russia does have the means of using a hundred-megaton bomb upon us that it will not do so and thus in one single salvo of scores of thousands of megatons lay our cities to rubble, lives to death, and rendering our second strike capability purely academic.

The Communist regimes to achieve their end adopt whatever tactics are needed—fair or foul; human lives are not spared. We have witnessed that course in Yugoslavia, Hungary, Red Russia, Red China, Cuba—20 million of humble Russians were put to death by Stalin and Khrushchev to maintain their political supremacy.

If and when the Communist regime of Russia believes that it has superiority of power over us, it will not hesitate to inflict the cruelest, the most inconsiderate, and devastating assault upon our country that has ever been perpetrated against any nation in the world.

The item of developing an antiballistic missile has been much in discussion in connection with the treaty. The Joint Chiefs of Staff testifying through Gen. Maxwell D. Taylor on this subject stated:

In the antiballistic missile field development of the U.S. system does not depend on atmospheric testing, and, hence, this treaty will not significantly influence any imbalance that may exist.

Both sides could achieve an antiballistic

Both sides could achieve an antiballistic missile but one with less desirable characteristics than would be the case if the additional atmospheric tests were conducted.

Under the treaty both sides could make about the same technical progress in the ABM field, although the Soviet may possess some information not available to the United States.

Dr. Edward Teller recently in a public appearance stated:

In 1958, in 1959 I was in favor of an atmospheric ban because at that time I did not believe in nuclear defense; I thought it was too difficult. But in 1961 and 1962, the Russians put up a terrific show of atmospheric explosions, and during 1961 they said they had the nuclear defense.

This together with many discussions on nuclear defense which followed have convinced me that I must change my mind; that nuclear defense, though extremely difficult, might be possible.

Dr. Edward Teller also has stated:

When the offensive power of two belligerents is equal, defense becomes decisive. * * * The scientists who maintain that this ABM is an impossible or Gargantuan task are misleading us and selling science down the river.

What the position of Red Russia is regarding an antiballistic missile neither the military agencies nor any other agency is able to tell.

One important witness in discussion the alleged antiballistic-missile systems encompassing Leningrad stated that in his opinion: "It is a bluff."

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Another witness supporting the treaty said that in his opinion the deployment of the alleged antimissile system around Leningrad came about because:

Some of their scientists or engineers sold them a bill of goods. That happens here, too, I mean the situations are not all that asymmetrical.

The people of our country through the years have been told about the work that is being done in developing an antiballistic missile system in the United States. Our development of the system has not reached the point where it warrants deployment of the actual weapons. That has been specifically stated by officials of the Government.

Red Russia on the other hand claims that it has developed the system and is

now deploying it.

Suddenly what was once considered to be the most important service to be rendered in the United States to our civilian population and our military personnel has become an insoluble objective. Manifestly, if Red Russia has an ABM system and we do not have it, a wide disparity in strength does exist to our disadvantage.

Red Russia believes in huge megaton weapons. Secretary McNamara and others believe that we can achieve great success by using two or three smaller weapons instead of one very large one. With regard to this issue it must be remembered that many factors enter into this equation—that is, the ability of our bases to withstand damage done by a hundred-megaton bomb and also the effects such a blast would have upon our weapons system and the blackout that it might impose upon our communications devices.

It is a fact that we have never tested the impact that a nuclear superweapon of the yield of a hundred megatons would have upon our operational sites.

If the large rocket boosters are not of special value, why are we striving so vigorously to develop them?

The question is also pertinent concerning the efforts that will be made by our Government to develop a 50- or 60-megaton warhead through the knowledge obtained in underground tests.

It is my hope that the course we are following is the right one. But, if we are wrong, I doubt very much whether we will be able to extricate ourselves as we did in the last war from mistakes that were made. It well may be that the possession of this super hundred megaton weapon with the necessary rocket boosters constitutes a commanding advantage for the Soviets.

For years our leaders discounted Russia's ability to cope with modern technology. They told us that:

It would take scores of years for Russia to develop the atomic bomb. Russia developed it in 4 years.

The Soviet technology was too backward to produce a hydrogen bomb. Russia dropped an operational nuclear bomb from an airplane 5 months ahead of us.

Russia would never be able to cope with the production of jet aircraft. She has hundreds of supersonic jet bombers.

Russia would never develop ICBM's. Russia designed and launched one a year ahead of us and put it promptly into production.

Russia would never be able to put a manmade satellite into space ahead of us. The Russian sputnik was the first to orbit the earth.

We would be the first to hit the moon. Russia hit the moon ahead of us, and has taken photographs of its unseen other side—an accomplishment we have yet to duplicate.

We would be ahead of the U.S.S.R. in putting man into space. They were the first to accomplish this feat.

It would take years for the U.S.S.R. to develop atomic submarines. These submersibles are rolling off Russian ship-yards probably as fast as ours.

All of these claims were subsequently proved to be untrue

proved to be untrue.

WHAT WILL BE THE ULTIMATE COMPARABLE POSITION BETWEEN THE STRENGTH OF RED RUSSIA AND THE UNITED STATES HAVING IN MIND THAT IN THE FIELD OF LARGE NUCLEAR WEAPONS WHERE RUSSIA HAS THE UNDISPUTED LEAD, BOTH RED RUSSIA AND WE WILL BE PROHIBITED FROM TESTING?

In the low-yield weapons where we are in the lead and Russia is trailing, testing underground will be permitted to both Red Russia and the United States.

Obviously, our ability to either catch or surpass Red Russia in the development of large nuclear weapons will come to an end; while the ability of Red Russia to catch and possible surpass our country in the development of low-yield nuclear weapons will become a distinct possibility.

It is possible that here lies the very reason why Khrushchev has agreed to this treaty?

Since 1958 while the conferences for the achievement of a nuclear test ban have been in progress, Red Russia has adamantly been opposed to on-the-site inspection and, finally, under complicated conditions agreed to only three onthe-site inspections of suspected nuclear test explosions at the most. It never would budge a single bit from this position of a limit of three inspections.

In 1961 and 1962, as we all know, in violation of the moratorium against tests, it launched experiments excelling ours practically beyond belief. In those tests it acquired information that will aid it in solving the problem of blackout of communication systems, the strength required to have an adequately hardened missile site, the means that should be taken to eliminate the damage done to weapons and weapons mechanisms.

Certain phases of this research, of course, can be done by underground tests. The testimony, however, is entirely too weighty that there are certain aspects of the problem that can only be done by atmospheric testing.

Gen. Maxwell D. Taylor further in his presentation of the position of the Joint Chiefs of Staff stated:

It is important to emphasize that the superiority under discussion in the preceding paragraphs refers essentially to technological superiority. It does not take into account such superiority as derives from number of weapons, variety of delivery systems, and the magnitude of the nuclear plant and the stockpile. Hence, technological superiority

Is only one aspect of the net superiority which must take into account all of these factors. As to net superiority and ability to inflict damage on the enemy, the Joint Chiefs of Staff consider that the United States at present is clearly ahead of the U.S.S.R. in the ability to wage strategic nuclear war and is probably ahead in the ability to wage tactical nuclear war; whereas the Soviets have developed a substantial midrange ballistic missile capability.

They (the Joint Chiefs of Staff) concluded that the United States would not be able to overtake the present advantage which the U.S.R. probably has in the high-yield weapons field; whereas, the Soviets by underground testing probably could retrieve in time any lead which we may presently have

in the low-yield tactical field.

In the field where we are ahead, Russia will catch up; in the field where Russia is ahead, we will remain at our present fixed disadvantage.

It appears to me that from the standpoint of our ability to maintain the security of the country, the provisions of the treaty are distinctly to our disadvantage. Military gains are made available to the Soviets and denied to the United States.

If we are mistaken—and we well can be—about the advances that Russia has made in the development of an antiballistic missile system and the knowledge that it acquired in the tests made in 1961 and 1962, in breach of the 1958 moratorium, of the impact of a hundred-megaton nuclear explosion on missile sites, communications systems, and weaponry, the present signing of the treaty may place us in a most embarrassing position at a later date in the event we find it necessary to withdraw.

ARE THE POLITICAL ADVANTAGES THAT WILL BE GAINED OF A VALUE ADEQUATE TO REPAY THE UNITED STATES FOR THE MILITARY DISADVANTAGES THAT IT WILL SUFFER?

It is claimed by the proponents of the treaty that there are certain political advantages which flow from the treaty that warrant the Senate to approve the agreement. Contention is made that after the treaty is executed the proliferation of nuclear weapons will stop and that the causes of world tension will be reduced.

Let us take a look at these contentions. Red China and France are the only present potential developers of the nuclear bomb; they will not be signatories to this document. Thus at the very beginning the argument of the nonproliferation that will result from the execution of the treaty is negated.

If the United States attempts to induce France to abandon its objective of possessing a nuclear bomb, the result might very well be the disintegration of NATO—that we cannot suffer.

REDUCTION OF WORLD TENSIONS

The second argument given in support of the political advantages is that it will result in a "reduction of causes of world tension." With this argument I, likewise, cannot agree. Russia at this very time is provoking world tensions wherever the field is fertile and suitable.

Have world tensions been reduced in the following areas suffering from Communist infiltration, subversion, pushbutton precipitation of riots, sabotage, murder, and other Communist devices:

South Vietnam, Korea, Cuba, Haiti, Nicaragua, Guatemala, Venezuela, Colombia, Brazil, British Guiana, and

other places?

The Communist Party of Red Russia has not changed its long-range strategy. With its present problems with Red China—rooted merely in tactical opera-tion with Red China and not in the longrange objectives of the Communists of Red Russia and Red China; in its need of providing consumers' goods for the people of Russia; and in its constantly disturbing problems among the exploited people of its satellite nations—a breathing spell is needed. But eyen with that need, no tangible action is taken by Communist Russia to relieve the tensions which the Communists are caus-The truth is that if we believe that the signing of this treaty will cause Red Russia to lessen the tensions of war that exist in the world, we are unpardonably mistaken. Red Russia contemplates no such result from the treaty. The efforts to destroy existing governments in the world will go on; communism will seek to be substituted everywhere for existing non-Communist governments,

CAN WE RELY ON RED RUSSIA TO KEEP ITS COM-MITMENT IN THE EVENT WE SIGN THIS TREATY?

If we are to judge its conduct in the future by what its conduct was in the past, the answer is that the treaty will be breached if and when it suits the convenience of this Communist signatory.

During the hearings of the Foreign Relations Committee members on the treaty, I asked the Secretary of State certain questions about the breach of commitments made by Red Russia in the past. The questions which I put and the answers which I received were as follows:

Senator Lausche. Mr. Secretary, I will try to develop thoughts with respect to the life of the treaty. In the 10 minutes it may be a little bit difficult. I understood you to say this morning that in discussing article IV of the agreement concerning how it might be terminated that the Russian representatives took the position that renunciation is a matter of sovereign right, and therefore required no delineation in the treaty; is that correct?

Secretary Rusk. Yes, sir; and that has been a rather general approach of theirs to

this problem.

Senator Lausche. That is Red Russia takes the position that when it makes a treaty, in the absence of specifying a particular period of time that it is to endure, it has the in-

whenever it pleases?

Secretary Rusk. That is a general point of view, sir. I would not want to say that that is flat and comprehensive over every issue; I would have to see every every issue; I

would have to be advised on that point. Senator Lausche, If we approve this treaty I am quite certain that the Congress as well as the administration would contemplate executing it in the spirit and in the letter. May I have your opinion on that subject?

Secretary Rusk. I think there is no ques-

tion about that.

Senator Lausche. And if that is the fact, not only the Congress but the administration and the people of the country should weigh what the probability is of Russian attitude concerning the fulfillment of the promise. Secretary Rusk. All right sir.

Senator Lausche. With that premise laid, I want to recite here Russia's conduct of the past, and I begin on February 2, 1920, when

it made separate peace treaties with Estonia, Latvia, and Lithuania, recognizing the independence and autonomy of these countries and renouncing voluntarily and forever all

rights of Russia over these people.

On June 16, 1940, in the face of that treaty, Soviet troops occupied Estonia, Lat-

via, and Lithuania.

I go to Iran. There was a tripartite alliance on January 29, 1942, to which Red Russia was a signatory, and it promised to withdraw its forces from Iranian territory.

In 1945 Red Russia equipped the rebels with Soviet arms and Red army uniforms. Iranian forces were neutralized by Red army

troops.

In January of 1946 Iran appealed to the United Nations charging the Soviet Union with violating the agreement and interfering with its internal affairs and nothing was done about it.

I now go to Yalta. We heard so much about it. In the Yalta Agreement, Red Russia, the United States, and the United Kingdom agreed to assist liberated people to form interim government authorities broadly representative of all democratic elements in the population and pledged to the earliest establishment through free elections, and I want to repeat that, free elections, and the right of self-determination of governments responsive to the will of the people.

Now, the violations: In Hungary, acting through the Hungarian Communist Party and its own agencies and armed forces in Hungary, Red Russia suppressed the will of the Hungarian people by installing the minority Communist dictatorship and denied Hungary fundamental freedoms. thing was done in Rumania and Bulgaria.

I now go to Poland. In 1932 on July 25 Red Russia signed an agreement that there. would be no aggression of Red Russia on Poland and not by Poland on Red Russia. We all remember this stab in the back on September 17, 1939, when Poland was fighting Germany on the west and Red Russia attacked Poland on the east.

I now go to the United States. In 1933 when Red Russia was begging the United States to establish trade relations with Russia, just as Kadar is now doing, and Litvinov wrote a letter to our Government committing himself that on Russian soil no agency would be permitted to exist contemplating intruding communism upon other nations of the world.

In violation of that Litvinov letter undoubtedly about which you know, the Comintern was in existence and they

tempting to communize the world.

No. 10, Finland. There was an agreement that before Russia and Finland were engaged in war that the issue would be submitted to arbitration, and that in no event would resort be made to war until 3 months after the report of the arbitrators. On November 26, 1939, the Soviet Government attacked Finland.

I now come to Hungary of 1956. When those patriots took control of the govern-ment and Imre Nagy was in charge, Red Russia said, "We will remove the Red Russian troops. Pravda will tell the story."

The story was carried throughout the United States, but while we were relying upon that promise they were bringing in their tanks and their guns and their militarv men.

No. 12, German reunification. On July 23, 1955, the Foreign Ministers of the Governments of France, United Kingdom, the United States, and Red Russia stipulated, the heads of Government have agreed, that settlement of the German question shall be by means of a free election. That was repudiated and broken.

We now come to China, subject 13. The alliance between the Republic of China and the Union of Red Russia agreed to work together in close and friendly collaboration

after the coming of peace following World War II, and to act according to the principles of mutual respect for their sovereignty. That treaty was broken.

Then we come to the very significant Potsdam agreement on Germany. It was promised that Germany would not be scalped and denuded of all its economy. The signatories to that promise kept it except Red Russia, and it carried out everything it possibly could causing us to pour huge sums of money into Germany to reestablish the economy. There were other commitments made in the Potsdam agreement that were broken.

I now come to the Kellogg-Briand Treaty, which is significant. The Kellogg-Briand Treaty outlawed war as an instrument of national policy. The Red army invaded Manchuria on October 12, 1929, 1 year after it promised to outlaw war. Here we are sort of outlawing the nuclear tests. I wonder how long we can rely on that.

Japanese war prisoners. It was agreed by Red Russia that it would return those pris-

oners. It still has not done it.

Korea, item No. 17. It was agreed on December 27, 1945, there shall be set up a provisional Korean Democratic Government. There shall be a joint commission to provide a four-power trusteeship of Korea for a period up to 5 years. From the very beginning, the Russian representative refused to collaborate and to act in pursuance to that agreement.

-No. 18, the return of German prisoners of war from the concentration camps, it still has not been done. Then we have had the peace treaties with Hungary again and Rumania and Bulgaria also violated.

Now, may I ask, Mr. Secretary, which is the last agreement that Red Russia has violated? I have in mind the Cuban commitment that we would have the right to inspect and ascertain whether the missiles were removed. Am I correct in that or not?

Secretary Rusk. That was a basis for the exchange, basis of the exchange between the President and Khrushchev during the week beginning October 22.

Senator Lausche. That promise was not

Secretary Rusk. That is correct, sir. you recall, Castro would not accede to that. Senator Lausche. Yes. That is, the commitment was made that neutral nations would be permitted to go in and see whether the missiles were removed. That commitment was not executed, is that correct?

Secretary Rusk. That is correct, sir; but there were certain alternative arrangements that were made, as you remember.

Senator Lausche. I have a letter here from the State Department saying that we are not bound by the promise not to invade or any of the other promises that we made because the commitment of Khrushchev was not kept to allow us to inspect.

Now, I ask you, in the face of this fragmentary recitation of breeches of commitments, if we are to judge Red Russia in the future by what it has done in the past, what can we expect?

Secretary Rusk. Senator, I am quite famillar with this somber story. I think myself that we should consider whether or not it is the present intention and purpose of the Soviet Union to comply with this treaty without necessarily at this stage trying to guarantee to ourselves that this will be their attitude forever into the future.

I believe that there would be no particular reason for them to enter into this treaty unless they had a present intention of living up to it, for two reasons. One is that violations of this treaty are highly subject to detection, and the cost to the Soviet Union throughout the world in terms of quick signature, and a quick violation would be very high.

Second, they have paid a significant price in their terms for this treaty, because this

has precipitated in the sharpest possible form the attack by Peiping on the Soviet Union based upon this treaty, and this has created even deeper divisions and more hostile divisions within the Communist world than had occurred before. But we can't ignore the record that you have exposed here this afternoon.

Therefore, we must ask ourselves whether the interests of the United States are adequately protected in the event of violation. I think that answer is "Yes," but I think this is an answer that the Senate has to find

out for itself.

The CHAIRMAN. The Senator's time is up. Senator Lausche. Just one-half minute.

For 5 years in the Foreign Relations Committee, behind closed doors and to questions put to you since you have become Secretary, I argued that there never can be a consortium between the 700 million Chinese and the 240 million Russians. Red China is looking for-lebensraum, and its eyes are directed into Russia, and that was inevitable in my judgment, as it will grow worse as time goes on.

Mr. President, I have tried to bring myself to the judgment of approving this test ban treaty. My reasoning, how-ever, simply prevents me from doing so. I am convinced that the treaty is not in the interests of the security of our country. It imposes military disadvantages upon the United States while it grants to Russia positions of favor to which it is not entitled. The treaty will be adopted. It would have been more comfortable for me to have followed the crowd. To have done so, however, would have required an abandonment of an honest judgment and the adoption of a course which I deeply believe is neither in the interests of peace nor the security of the United States. Whatever deterrents have come to the efforts of Red Russia to expand its boundaries have been the consequence of Russia's understanding that while we wanted peace, we did have the might and the will to maintain the honor and the security of our Nation. Peace will prevail in the world so long as the United States retains that position of strength, but not any longer.

On the basis of the facts as I understand them as herein set forth, I will cast

my vote against this treaty.

Mr. ROBERTSON. Mr. President, I am happy to hear the Senator from Ohio say that he will vote against the treaty. I hope that he does not have as much difficulty in being quoted on that statement as I have had in being quoted to the effect that I shall vote against the treaty.

I read an article in the newspaper today stating that all but five Senators will be for the treaty. I made a speech of over and hour in which I said that I would be against the treaty. First, I found a piece on the front page of a newspaper which stated that the distinguished Chairman of the Foreign Relations Committee had said that I had lied. Of course, he had not. But the article indicated we were about to fight a duel over the treaty.

Mr. HUMPHREY. Mr. President, will the Senator yield?

Mr. ROBERTSON Then the Associated Press sent out that story. I do not know why they did. As soon as I could get the floor, I denied the statement.

A District of Columbia newspaper published the story under the heading of

"Loud Speakers in the Senate." At the conclusion of the article there appeared the statement that I had denied the charge, and then there was printed what actually occurred. All right. Then the Associated Press—and I know that it is a fine agency and did not mean to misrepresent me-transmitted a story to the effect that I had said that I was going to violate my conscience by voting for the treaty. I have received telegrams and letters which expressed the feeling that the writers were shocked that a man would violate his conscience by voting for the treaty.

Mr. HUMPHREY. Mr. President, will the Senator vield?

Mr. ROBERTSON. I yield.

Mr. HUMPHREY. I read the story in the Washington Post, to which the Senator referred, about microphones in the Senate. This morning I have noted no need for such microphones. The Senator from Minnesota has seldom been accused of needing a microphone. The Senator from Ohio speaks with such eloquence and clarity that he does not need a microphone.

Mr. LAUSCHE. And brilliance.

[Laughter.]

Mr. HUMPHREY. And brilliance, yes, and persuasive eloquence. The Senator from Virginia if the Associated Press will misquote him, will never need a microphone. Nevertheless, I wish to come out for microphones. Once again I shall support a resolution that would modernize the Senate Chamber. I do not believe we ought to go too far because we might upset some of the old traditions. But at least we can go so far as doing what our fellow Members of Congress do in the other body. We might install microphones so that the people in the galleries and the reporters in their gallery might be able to hear at least the official deliberations that go on in the Chamber

Mr. ROBERTSON. We might at least go down to a well, as is provided in the House, and there have a microphone through which we could address our colleagues. Then those in the gallery could also hear.

Mr. HUMPHREY. Such an arrangement would eliminate any trouble about where a Senator should stand. The present rule requires that he stand at his desk.

Mr. ROBERTSON. The Senator from Virginia does not suffer from any throat trouble. He is sure that the representatives of the fine news agency called the Associated Press can bear him when he reads a copy of a telegram that he sent yesterday to the managing editor.

Mr. LAUSCHE. Mr. President, will the Senator yield?

Mr. ROBERTSON. I yield.

Mr. LAUSCHE. How will the Senator vote on the treaty?

Mr. ROBERTSON. The Senator from Virginia thought that he had made crystal clear that he would vote against the treaty. I shall read a telegram which I sent to the newspaper which published the statement that I would violate my conscience by voting for the treaty. I know that the publisher did not intend any double entendre or double meaning. I said that I would violate the dictates

of my conscience if I did not vote against the treaty.

It is all in this telegram.

Mr. HUMPHREY. Mr. President, will the Senator yield at that point?

Mr. ROBERTSON. I yield.

Mr. HUMPHREY. I know the distinguished junior Senator from Virginia is not really worried about that misquotation, because there is not a living mortal in Virginia or outside Virginia who would ever believe that the Senator from Virginia would vote against his conscience and what his conscience directs him to do. There are times when I wish the Senator's conscience would lead to a little different point of view, but the Senator is always true to his conscience, and the Associated Press was only having a joke. There is no doubt about that. It really made a sort of humorous mistake.

Mr. ROBERTSON. I do not think the Associated Press would try to perpetuate a joke on a Member of the Senate. Somebody has engaged in some proliferation of words about the treaty. It is a bit difficult, in writing it all up, to see exactly how anyone could misconstrue it.

I will tell the Senator what happened.

I will read the telegram.

MANAGING EDITOR Los Angeles Herald Examiner,

Los Angeles, Calif.:
On page A-2 of your issue of Monday, September 16, 1963, you carry an Associated Press story quoting me as saying that I would violate the dictates of my conscience to support the test ban treaty. I said in my speech that I will vote against the treaty because it would violate the dictates of my conscience to support it, in view of information I have received about the dangerous military consequences if it is ratified. I am receiving mail from your readers expressing outrage that I intend to violate my conscience in order to support the treaty, which is what's the erroneous sentence says but is the exact opposite of my stand. Please publish a correction making it clear that I oppose the treaty, that I am going to vote against it, and that I said so in my floor speech Monday, September 16.

Mr. LAUSCHE. Mr. President, will the Senator yield?

Mr. ROBERTSON. I yield.

Mr. LAUSCHE. It is a strange coincidence that in my mail today I received a letter containing the following:

DEAR FRANK: The gist of the attached clipping is that somebody put one over on Congress, and as a result, millions of our tax dollars are being wasted by the Area Redevelopment Administration.

Senator Robertson, Democrat, of Virginia, is mentioned as one who is getting wise.

That is in a letter from a constituent in Ohio.

For the grief which the Senator has suffered from the misquotation by the newspapers. I hope this will be some balm to him, that the sincerity of his work is spreading into our State.

Mr. ROBERTSON. That is encouraging. I admit that I have gotten more national publicity from a story that a man called me a liar than anything I have done in the Senate in 17 years. That is the ways these news items are built up.

Mr. THURMOND. Mr. President, Adm. Chester Ward, U.S. Navy, retired, former Judge Advocate General

of the U.S. Navy, has prepared a very interesting article for next week's issue of the American Security Council's "Washington Report." It is entitled "Beyond the Ban: the 'Destruction Gap." So that the Members of the Senate might have an opportunity to read this material prior to the final vote next week, I ask unanimous consent that Admiral Ward's outstanding article be printed in the body of the Record at the conclusion of these remarks.

the conclusion of these remarks.

Mr. President, I also ask unanimous consent that at the conclusion of these remarks an article written by the distinguished military correspondent of the Baltimore Sun, Mr. Mark S. Watson, entitled "Side Effect of A-Blast Worries Foes of Ban," be placed in the body of the Record. This article appeared in the Sun on September 14, 1963.

There being no objection, the articles were ordered to be printed in the REC-ORD, as follows:

[From Washington Report, American Security Council]

BEYOND THE BAN: THE "DESTRUCTION GAP"

JOINT CHIEFS OF STAFF WARN TREATY GUARANTEES SOVIET SUPERIORITY

In the new era opened by the Treaty of Moscow and envisioned by President Kennedy in his address to the U.N. General Assembly—the United Nations, regardless of how much it may be strengthened as an instrument for maintaining world peace, will not have the power to restrain the Soviet Communists from world conquest. Nor will the United States.

Momentous testimony by the Joint Chiefs of Staff reveals: (1) that the Soviets have a 3-way lead in the only type of weapony sufficiently powerful to control the world; (2) that U.S. adherence to the Moscow Treaty will guarantee continuance of the Soviet lead; and (3) that Soviet superiority in strategic high-yield weaponry is of a type which renders irrelevant or impossible of execution, the so-called unqualified and unequivocal assurances against the treaty's operating to imperii American security.

It reveals also that Secretary of Defense McNamara's claims of vast U.S. "nuclear superiority" will soon depend upon our striking first (which we will never do), with manned bombers (which we will no longer have). His claims of "missile superiority" are based on numbers alone, and ignore the fact that Soviet weapons exceed ours in explosive power by from 30 to 100 times. His claims of "technological superiority" sound as if they covered the entire spectrum of weaponry, but actually refer primarily to what Joint Chiefs of Staff call very-low-yield tactical weapons, which run to less than one-thousandth of the power of the range in which the Soviets hold guaranteed supremacy.

Would you be willing to stake your life—and the lives of your children—on the accuracy of the administration's assurance that the Treaty of Moscow will not imperil the security of the Nation?

curacy of the administration's assurance that the Treaty of Moscow will not imperil the security of the Nation?

You would be dead now—if your life had been staked on the accuracy of the administration's assurance last September, that there was no substantial danger of Soviet offensive weapons in Cuba.

You would be dead now if your life had been staked on the accuracy of the administration's assurance, up until September 1961, that adhering to the first test ban did not imperil U.S. security.

The September 1961, strategic miscalculation of risk cost us—as has just been officially, conceded for the first time—our superiority in the only nuclear weapons powerful enough

马帕维拉

to control the world—those with the explosive power of tens of millions of tons of TNT.

The September 1962, strategic miscalculation of risk needlessly and uselessly exposed scores of millions of Americans to nuclear incineration; and we were saved from the threat of a nuclear surprise attack only by the grace of God and an aerial photograph.

The September 1963, strategic calculation of risk has been made. President Kennedy has assured the Senate, by letter of September 11, 1963, that the Treaty of Moscow is "safe and necessary." It was only last September, however, that he assured the public that the "increasing numbers" of Soviet shipments of arms to Cuba were "under our most careful surveillance," and that "I will repeat * * * that these shipments do not constitute a serious threat to any other part of this hemisphere." Then, in less than a month came the U-2 aerial photographs. Later, he was wrong also about the Soviets keeping their promise of on-site inspections.

This September, your life has been staked on the administration's assurance that the risks involved in this third deal, with the Soviets are small, and that our national security can be fully maintained in the new era opened by the Treaty of Moscow. The survival of the United States is also at stake.

If the administration is wrong again in its calculation of risks, you may lose your life in a nuclear Pearl Harbor—or lose your way of life as a result of Soviet ultimatum demanding surrender.

There is hard evidence that the administration is wrong again. It can not be photographic evidence, of course—but like the U-2 photograph that saved us last time, it is evidence more factual than opinionative in nature. Also, like the aerial photograph, its warning can be understood only through subjecting the facts revealed, to an analysis to develop their strategic meaning.

to develop their strategic meaning. The import of the warning is so momentous as to overshadow the conclusion of the Senate Preparedness Investigating Subcommittee Report, issued on September 10, that the Treaty of Moscow will result in "serious, perhaps even formidable, military and technical disadvantages to the United States."

The source of the warning is a comprehensive "JCS Position Paper." It was prepared with reference to "this particular treaty at this particular point in time." The Joint Chiefs of Staff adopted it only after extensive deliberations and consultations with the Department of State, the Atomic Energy Commission, the Central Intelligence Agency, the Office of the Secretary of Defense, and others "with particular competence and responsibilities in the field." It was submitted to the Senate committees by the Chairman of the Joint Chiefs of Staff, testifying under oath. None of its statements, therefore, can be discounted.

Here are the key assertions of the JCS position paper. They are phrased in the most unsensational of technical language. They offer, however, a still timely warning of the most horrendous danger ever to threaten the national existence of the United States.

1. The Soviet Communist objective: "Militant communism remains dedicated to the destruction of our society."

2. Soviet capability of carrying out our destruction: "The USSR is ahead of the United States in the high-yield—tens of megatons—technology, in weapons-effect knowledge derived from high-yield explosives, and in the yield/weight ratios of high-yield devices."

3. Treaty of Moscow guarantees permanence of Soviet superiority in weapons of tens of millions of tons explosive power: "If * * both sides faithfully observe its provisions * * the United States would not be able to overtake the present advantage which the U.S.S.R. probably has in the

high-yield weapons field, whereas the Soviets, by underground testing, could probably retrieve in time any lead which we may presently have in the low-yield tactical field."

The military Chiefs were not, of course, free to explain the meaning of these stark and somber facts. An objective strategic analysis, however, on the basis of those facts will assign to the Treaty of Moscow a significance unprecendented in all history: The most powerful nation in the world, with a present vast superiority of strategic military power in-being is: (1) abdicating its position of world supremacy, and (2) is guaranteeing to its enemy the capability—without challenge and without time limit—of developing overwhelming strategic supremacy sufficient to destroy the formerly most powerful nation, without risking devastating retaliation.

How can the Moscow Treaty operate to guarantee the Soviets the capability of developing overwhelming strategic nuclear power, if the United States holds such a vast supremacy in such power pow?

supremacy in such power now?

The Joint Chiefs' position paper supplies the facts which provide the answer to that pivotal question. The same JCS facts provide the answer also to the equally significant question: How can Secretary of Defense McNamara's claims of U.S. "missile superiority" and "nuclear superiority"—under cover of which he is scrapping all U.S. manned bombers—be at least partially or even technically true, and still be grossly deceptive to Senators and citizens?

Here is how it works. The JSC, referring to the Soviet superiorities in "high yield devices"—meaning both bombs and missiles—and to the "probable" U.S. superiority in the field of very-low-yield tactical weapons, explain:

"It is important to emphasize that the superiority under discussion * * * refers essentially to technological superiority. It does not take into account such superiority as derives from numbers of weapons, variety of delivery systems, and magnitude of nuclear plant and stockpile. Hence technological superiority is only one aspect of the net superiority which must take into account all these factors.

"As to net superiority in ability to inflict damage on the enemy, the JCS consider that the United States is clearly ahead of the U.S.S.R. in the ability to wage strategic nuclear war, and is probably ahead in the ability to wage tactical nuclear war, whereas the Soviets have developed substantial midrange ballistic missile capability."

This necessarily sounds—superficially—as if it is backing up the McNamara claims. It had to sound that way, or JCS could not have said it. Actually, strategic analysis is necessary to reveal what it really means.

More than 90 percent of our present nuclear striking power—that is, "ability to inflict damage on the enemy" has to be delivered by manned bombers. These bombers are capable of carrying about 30,000 million tons of explosive power. McNamara's "more than 500 missiles" can deliver a total of about one-thirtleth of the bomber load. Thus our net superiority, which is our present "nuclear superiority" depends on the SAC bomber force being in existence and being operational.

A Soviet surprise missile strike with less than 15 minutes warning—such as from Cuba or by missile submarine—could destroy about 90 percent of our bombers in their soft bases. Thus our superiority (and the overkill which even Mr. Kennedy has referred to) depends upon the United States striking first.

President Kennedy has officially declared that we will not strike first. Hence the statements of our "net" superiority based on our striking first, are deceptive. So also are such statements as "We have enough nuclear

power to kill 300 milion people in 60 minutes. How many weapons do we need?"

Even without a Soviet no-warning surprise attack, however, our net superiority and our lead in "ability to inflict damage on the enemy," will soon vanish. McNamara is far advanced in his program of scrapping U.S. bombers, and has killed all programs for their replacement by advanced type bombers. As soon as his scrapping program is complete, we will have abandoned more than 90 percent of our total nuclear striking power, and all of our massive nuclear striking power. His program contemplates cutting down our capability from between 30,000 and 40,000 million tons of explosive power based overwhelmingly on bombers, to 2,000 million tons depending almost exclusively on missiles. U.S. Navy aircraft carriers have a substantial delivery capability, but McNamara's programs contemplate cutting them also, and reducing the number of strike aircraft the remaining ships may carry.

As soon as the U.S. SAC bombers are taken

As soon as the U.S. SAC bombers are taken out of operational status, missile superiority will control the world.

When missile superiority controls the world. The Soviets have both technological and eperational superiority in missiles now, and the Treaty of Moscow will guarantee the continuance of their superiority in the future. This is the meaning of the JCS statement. "The U.S.S.R. is ahead of the United States in the high-yield—tens of megatons—technology * * and in the yield/weight ratios of high/yield devices. * * If the treaty goes into effect * * the United States would not be able to overtake the present advantage which the U.S.S.R. probably has in the high-yield weapons field."

This concedes to the Soviets an existing and guaranteed for the future capability of opening a massive "missile-explosive power gap." This gap already amounts to thousands of millions of tons of TNT explosive power. The Soviets have the capability of opening the gap by orders of magnitude each year, if the United States remains bound to McNamara's low-powered missile program and the Moscow Treaty. As soon as the U.S. bombers vanish, the "missile gap" will become a "destruction gap" because it will give them the greater power to inflict damage on the enemy. When the "destruction gap" becomes massive enough, it will amount to a "deterrent gap" because our retaliatory strike capability will no longer be relatively powerful enough to deter the Soviets from a surprise attack or delivering an ultimatum.

The new missile gap will result not from numbers, but from warhead power. Warhead power in turn depends upon yield/weight ratio and the warhead weight which the missile can deliver, which depends on the rocket thrust power. The Soviets are substantially ahead in both factors. Destructive effect of missiles (on a target which will not be "overkilled" by one hit) goes as two-thirds of the power of the warhead. That is, increasing the explosive power of the warhead by a factor of 3 is the same as doubling the number of weapons. The CEP factor of accuracy of guidance is also crucial. An improvement of 20 percent is considered as equivalent to doubling the yield of the warhead, but only for the purpose of destroying hardened military targets the location of which we know exactly. Both Soviet and United States accuracy is so good now, there is little room left for improvement. Both are known to be accurate within a half a mile—and it is not considered too much of an exaggeration to say that "We can hit an airfield—but the Soviets can hit a football field."

These statistics may seem boring now, but the survival of the United States and the lives of scores of millions of Americans depend upon an understanding of them.

Without them, it is impossible to understand how much—or how little it means, for

McNamara to claim: "The U.S. force contains more than 500 missiles * * and is planned to increase to 1,700 by 1966. * * The Soviets are estimated today to have only a fraction as many ICBM missiles. * * Between now and 1966, it is estimated that our ballistic missile numerical superiority will increase both absolutely and relatively."

The Soviet "fraction" of 500 could, of

The Soviet "fraction" of 500 could, of course be 400 or more—but it would be ridiculous to credit them with less than 120 ICBM's. Even Newsweek does (August 5, 1963), and the news "leaked" to it is generally close to U.S. estimates. The Soviets claim about 1,000.

Our missiles now probably average 3 megatons of explosive power; theirs, 30 megatons. Our number 500 times 3 megatons=1,500 megatons. Taking a low number for them, 120 times 30 megatons=3,600 megatons. This would give them a net missile explosive power gap of aircady 2,100 megatons, that is, 2,100 million tons of TNT equivalent. This gap will widen with extreme rapidity in the near future as the United States phases out its liquid-fueled Atlas and Titan I missiles which carry 5 or 10 megatons, and concentrates production on the 1-megaton Minuteman and Polaris.

McNamara plans a total missile force by 1966 of 950 Minuteman, 656 Polaris, and 54 Titan II. The explosive power in the total of their warheads would probably equal about 3,496 megatons. If the Soviets should build one-fourth as many, the explosive power of their warheads would equal 14,525 megatons. The explosive power gap in their favor would amount to some 11,029 megatons. The "destruction gap" would amount to 7,352 megatons. We would thus need more than 7,000 more Minuteman missiles to fill the gap.

We aren't going to get them—not in Mc-Namara's programs. Yet investing in 8,000 missiles would not be too high a price to pay for the survival of the United States. The realistic answer, however, is not such large numbers of missiles, but an increase in their explosive power. Leading nuclear strategists have recommended an increase by a factor of 5 or 10. To attain this, as verified by the JCS paper, we need atmospheric testing. Under the Moscow Treaty, we have signed away our right to take this measure required for our national self-preservation.

Thus, just as the Cuban deal gave a U.S. guarantee against invasion, to assure Soviet Communist control of Cuba, the Moscow deal gives a U.S. guarantee of continuing Soviet nuclear power to control the world.

The controlling strategic factor in the world balance of power during the new era opened by the Moscow Treaty, will be the massive missile gap. Life will be different, for you and your family, and for all Americans. As then-Senator John F. Kennedy prophetically asserted in 1958, America would soon become the "underdog"—as the result of the "gap" or "missile-lag" period. This he defined as a period "in which our own offensive and defensive missile capabilities will lag so far behind those of the Soviets as to place us in a position of great peril."

The JCS position paper establishes the fact that the Soviets have now, and that the treaty guarantees them for the future, the capability of creating exactly such a gap.

Ironically, the missile gap which John F. Kennedy attributed to the Elsenhower administration was imaginary—whereas the gap created by Kennedy administration policies is so real it will shape the future of the world. And it has been made permanent by treaty.

What will be the strategic results? The Kennedy predictions, which were completely wrong for the indicated period of 1960-63, are completely right for the period 1964 to the end of the McNamara defense policies

and the termination of the Moscow Treaty. They are even much more accurate, because in the new area there will be no U.S. SAC manned-bombers to more than fill the destruction gap. Here are some extracts from one of his series of articles entitled "Years of the Gap." published nationally by the Hearst Headline Service, and carried in the Los Angeles Examiner of August 24, 1958. Using the same substance, he made the missile gap a major issue in the 1960 presidential campaign.

 The "coming years of the gap will present us with a peril more deadly than any wartime danger we have ever known."

2. "As the missile striking power of the Soviet Union increases, and our own retaliatory power lags * * * the deterrent ratio might well shift to the Soviets so heavily during the years of the gap as to open to them a new shortcut to world domination * * *. A direct Soviet attack may be our greatest danger throughout the years of the gap."

3. "We are about to lose the power foun-

3. "We are about to lose the power foundation that has long stood behind our basic military and diplomatic strategy. We have possessed a capacity for retaliation so great as to deter any potential aggressor from launching a direct attack on us. This premmise will soon no longer be correct."

4. "The Soviet * * * missile power will be

4. "The Soviet * * * missile power will be a shield from which they will slowly but surely advance * * * through the victous blackmailing of our allies. The key areas vital to our security will gradually undergo Soviet infiltration and domination. Each such Soviet move will weaken the West—but none will seem significant enough by itself to justify our initiating the nuclear war that might destroy us."

The developments pictured by Kennedy, including the direct Soviet attack on us, will not wait until McNamara has scrapped the last U.S. bomber. Khrushchev's huge investment in his present antiaircraft missile program proves he does not intend to wait that long. Effective deterrence depends on our having enough bombers to saturate his air defenses. This we will lose as soon as McNamara scraps enough of them, so that the Soviet surprise missile salvo, plus air defenses; can take care of the rest. Our 1-megaton missile retaliatory capability, blunted by his growing and treaty-guaranteed high-yield missile superiority, is not sufficient to deter him.

What can be done? The most urgent step is to scrap McNamara's policies of no bombers and small missiles, before they scrap us.

Until we attain missile superiority in destructive power as well as numbers, we need more bombers. We can get them by resuming production of B-52's until we can rush mass production of RS-70's. We must increase our airborne alert, and arm our bombers with 60-megaton bombs. We must mount Polaris missiles on surface ships.

For the future, we must develop a reasonably invulnerable missile force capable of delivering 20 kilomegatons of big-warhead retaliation. Its command, control, and communications systems must be proof against knockout by Soviet superweapons. This force, not the United Nations, is the only power which can secure both world peace and the survival of the United States.

To build this U.S. force for peace and survival, we have tremendous assets. Our program for 54 powerful Titan II missiles can be trebled. Our huge new peaceful space program rockets can be converted to the more realistic peaceful purpose of effectively deterring war. We can develop more powerful warheads for our missiles.

For in missiles—as in planning effective strategy for national defense—it's what's up front that counts.

Rear Adm. CHESTER WARD,
U.S. Navy, Retired,
Associate Editor,

[From the Baltimore (Md.) Sun, Sept. 14,

1963]
SIDE EFFECT OF A-BLAST WORRIES FOES OF
BAN—SCIENTISTS OF AIR FORCE POINT TO
BYPRODUCT AFFECTING ELECTRONIC EQUIP-

(By Mark S. Watson)

Washington, September 13.—Despite the public spanking administered to the Air Force Association by Eugene M. Zuckert, Secretary of the Air Force, for its bold opposition to the nuclear test ban treaty, numerous nuclear scientists of the Air Force continue in

opposition.
Their concern about cessation of tests, it now appears, stems principally from the mystery surrounding a phenomenon of which the public now knows little but of which it is certain to hear more and more as research

into EMP becomes more intensive.
APPECTS ELECTRONIC DEVICES

EMP is the accepted abbreviation for "electromagnetic pulse," one of the byproducts of nuclear explosion. Its power is unmistakably such as to affect electronic equipment of every sort, including instruments for fire and guidance of our own ballistic missiles, that is, threatening the value of the ICBM itself, which now constitutes our chief war deterrent. The guestion is of how strong is the rent. The question is or now swong EMP's effect and how far does it reach.

Even the ferm is dealt with cautiously, and its use has repeatedly been censored out of official statements, including expert testimony before congressional committees, even though on many other occasions ranking officials have spoken or written of their concern over U.S. science's uncertainty about the electromagnetic pulse.

CENSORED BY POWER

Fundamentally their chief concern is that Fundamentally their chief concern is that Russlan military science, benefiting from the 1961 nuclear tests, may know much more than we do about EMP and its effect upon radio, radar, and other electronic processes. That concern helps explain refuctance on the part of the Air Force to block off American tests aimed at catching up with Russla.

Quite certainly this is one of the subjects of ignally touched on by Gen Thomas S.

originally touched on by Gen. Thomas S. Power, Chief of the Strategic Air Command, in his much-censored speech of yesterday before the Air Force Association. After censoring was completed his speech still said:
"There are uncertainties concerning effects
of high-yield nuclear weapons on our missile
sites which will have to ride out the initial

That suggests that, in theory, a Russian ICBM, sent against one of our ICBM missile-site complexes, even if unable to incapacitate any large number of the widely dispersed ICBM's by blast effect, could incapacitate the missiles themselves by EMP whose effect reaches much further, and conceivably deeper below ground, than the blast.

Viewed in its worst espects, this could provide second thoughts about the U.S. present "second-strike" policy. That policy, frequently stated this past year, contemplates accepting an enemy's first strike in the confidence that surviving U.S. resources could "ride out the initial attack" in Power's phrase, and then launch a mighty counterstrike against the enemy, sufficient, as asserted by Robert S. McNamara, Defense Sections of the counter of the counte retary, to wipe out the enemy's military resources.

The question now raised against the treaty (without effect on the Senate vote, it appears) is over the ability to "ride out" not only the blast power, which can be pretty well calculated but the Emp power, which at present is not computable at all and will not be without test.

not be without test.

A General Electric expert has surmised that a 1-megaton explosion could have effect upon electronic devices within a radius of

100 miles. It is understood that the pulse radiation from one of Russia's high-yield 1962 tests did in fact black out a U.S. satellite much farther off.

Also it has been reported that a mere 20-kiloton test on the Nevada nuclear test site affected power lines circuit breakers 100 miles away. It was this latter disclosure which lately spurred new U.S. Army Signal Corps efforts to develop electronic equipment less sensitive to radiation.

Emp works both ways. If its powers are such as to enable Russian ICBM's (in theory) to inactivate ours, it is certain that American ICBM's might do the same thing to Russia's—but only if they are used first, which is contrary to U.S. policy, and only if their powers are tested and proven, which is not in sight.

Whether military disadvantages outweigh political advantages, as contended successfully, it is not for the military to say. But it is manifest that there is little public knowledge of what the military disadvantages really are.

VETERANS OF FOREIGN WARS RESOLUTION OPPOSING NUCLEAR TEST BAN TREATY

Mr. STENNIS. Mr. President, the Veterans of Foreign Wars of the United States, at its 64th National Convention, gave its attention to the nuclear test ban treaty now under debate. This fine or-ganization includes within its membership many of the foremost thinkers and leaders of our times who are thorough and painstaking and are prompted by the highest consideration of security for our Nation and the free world.

I have before me the resolution 258 of the V.F.W. in opposition to the approval of the nuclear test ban treaty, to give the Congress and the people of the Nation the benefits of the logic and reasons set forth in the resolution, I ask unanimous consent that it be included in full in the body of the RECORD.

There being no objection, the resolution was ordered to be printed in the RECORD, as follows:

RESOLUTION 258, OPPOSING PROPOSED LIMITED ATOMIC TEST BAN TREATY

Whereas the Soviet Union has broken over 1.000 treaties and agreements since 1917 as attested to by Senate Internal Security Document No. 125; and

Whereas the Sovlet Union has signed treaties of nonaggression with neighboring states and then absorbed the states and has signed promises to refrain from revolutionary activities inside these countries with which it sought friendship and then cynically broke these promises; and

Whereas since that time we have seen nothing but a continuance of treaties broken by the Soviet Union, including the Soviet violations of the nuclear test ban moratorium; and

Whereas the proposed limited atomic test ban treaty, as other Soviet agreements, could be borken-this time with the nuclear vaporization of humanity: Now, therefore be it

Resolved, by the 64th National Convention of the Veterans of Foreign Wars of the United States. That we recommend that the U.S. Senate, in light of the previous treaty violations of the Soviet Union, do not approve the proposed limited atomic test ban treaty.

LET US STOP THE POISONOUS RADIOACTIVE FALLOUT

Mr. GRUENING, Mr. President, I wish to make a few brief remarks on the limited test ban treaty now before the Senate.

Almost 4 months ago—on May 27, 1963-I joined 32 of my colleagues in cosponsoring a resolution offered by the able and distinguished senior Senator from Connecticut [Mr. Dopp] to achieve precisely the result sought by the treaty now presented to the Senate. The operative portions of that resolution provided as follows:

Resolved, That it is the sense of the Senate that the United States should again offer the Soviet Union an immediate agreement banning all tests that contaminate the atmosphere or the oceans, bearing in mind that such tests can already by monitored by the United States without onsite inspections on Soviet territory.

That if the Soviet Union rejects this offer, as it has in the past, on the grounds that it wants a ban on all tests or nothing at all, we should not bow to this rejection but should, on the contrary, reiterate our offer and pursue it with vigor, seeking the widest possible international support for our position;

That if the Soviet Union refuses to accede to such a first-step agreement, we commit ourselves before the world to conduct no nuclear tests in the atmosphere or under water so long as the Soviet Union abstains from them; and

That, in committing ourselves to such a moratorium, either unilaterally or by agreement, we keep the Soviet record of deceit and bad faith in mind, and maintain our testing facilities in a state of constant readiness so that the United States will never be caught unprepared should the Soviet Union suddenly resume nuclear testing in the atmosphere or under water.

I have listened to and read carefully the arguments advanced against the Senate's giving its unreserved advice and consent to this treaty. While I appreciate the ability and sincerity of those who are advancing these arguments against unconditional ratification of the test ban treaty, I cannot agree with their arguments.

True, we cannot trust the Soviet Union—that we have been taught we have been taught through bitter experience.

True, the masters of the Kremlin have a long record of breaking treaties.

True, Khrushchev announced their purpose to "bury the United States."

True, they have invaded Alaskan waters, torn up the crab traps of Alaskan fishermen and taken fish in our waters forbidden them by international law.

True, they have been guilty of a variety of unjustifiable acts. They have never hesitated to practice deception, nor is there any evidence of any change of heart of purpose.

Even though we recognize these truths while not condoning them, even though we fully appreciate the perfidiousness of the men in the Kremlin and the need to be constantly on our guard against treachery, nevertheless we can, on the basis of all the testimony, safely enter into this treaty because the advantages to our own Nation in taking such a step far outweigh any possible disadvantages.

Those of us who sponsored Senate Resolution 148 last May were fully aware of these realities. Nevertheless we sponsored the resolution because we firmly believed that whatever risks remained could be safely averted by maintaining a constant state of readiness to resume testing—which the President has prom-

ised to do—and that it was essential for something to be done—and done promptly—to avoid further contamination of the atmosphere.

The proximity of the State of Alaska to the Soviet Union has made Alaskans particularly exposed to the dangers of radioactive fallout. My able colleague, Senator Bob Bartlett, has repeatedly stressed the poison from radioactive fallout that has stricken our Alaskan Eskimos. It has poisoned the lichens on the arctic tundra. The lichen is a rootless plant which absorbs its nourishment from the atmosphere, and it has absorbed the radioactive fallout generated by the tests in Siberia and carried eastward by the winds. It is on the lichens and moss that the vast herds of caribou in northern Alaska feed. They have taken the radioactive fallout into their bodies. Caribou meat is one of the principal foods on which the inland Eskimo depend. They in turn have been poioned.

On September 12, in a major speech on the floor of the Senate, my colleague [Mr. Bartlett] went into the whole subject exhaustively, ranging far beyond the effects in Alaska and citing in detail the findings of a number of distinguished scientists—Canadians, Americans and others—who have testified in their scientific publications to the increased incidences of congential deformities, lukemia, and cancer, clearly attributable to the nuclear testing in the atmosphere and in the space above the earth's atmosphere. My colleague has rendered a great service.

I consider Senator Bartlett's scholarly research made available to the Senate and the public—perhaps for the first time—to present an unanswerable factual presentation of the necessity of stopping all nuclear testing in the air and sea.

The test ban treaty before us is the first imperative step. Can we decently fail to take that first step? Can we, by abstention or opposition, sanction the daily malformation, agony and lingering death of some of this generation and of countless numbers of succeeding generations? Hardly.

Mr. President, despite the arguments so eloquently advanced by the able and distinguished chairmen of the Senate Armed Services Committee and the Preparedness Subcommittee, whose views I deeply respect, I am convinced we can enter into this treaty for a limited ban on atmosphere or ocean contaminating tests without endangering the security of the free world.

We can do so safely by remaining alert and ready at all times to resume testing if this agreement is breached, though I hope and pray that this need will not arise. I am convinced that we can overcome by preparedness any sudden resumption of testing on the part of the Soviet Union. That being so, then the advantages to the United States—and to all the peoples of the world—of a cessation of the constant pollution of the atmosphere and the contamination of mankit d are great, indeed.

Mr. President, I am not sanguine about the future actions of the Soviet Union

in the light of its willingness to enter into this limited test ban treaty. I would like to see some evidence of a new attitude, of a new purpose. But I refuse to peer into any crystal ball to determine whether this action on the part of the Soviet Union indicates an easing of the tensions of the world in the future. We can hope so, but that is all. We must judge each future action of the Soviet Union on its own merits, warily, and with a full realization of the intentions of that country as shown by its past history. But on balance, without interpreting the Soviet Union's willingness to enter into this treaty as the hoped-for beginning of an era of lessened tension and peace, it is my sincere belief that, for the sake of future generations, the United States can and must enter into this treaty.

I shall therefore vote in favor of giving the Senate's advice and consent to this limited test ban treaty.

Mr. HRUSKA. Mr. President, in his address to the Nation announcing the conclusion of the treaty which now lies before us for ratification, the President called for "a historic and constructive debate." That debate is now nearing the time of decision. It has been conducted in committee rooms, on the floor of this Chamber, in homes and halls across America, and in all the public media. We can congratulate ourselves that it has been conducted responsibly and with a keen regard for the gravity of the issues involved.

TREATY HIGHLIGHTS

Mr. President, stated in simple terms—and perhaps in oversimplified fashion—the treaty has for its objective a pledge by the three major signatories—the Soviet Union, the United Kingdom, and the United States—to stop testing nuclear weapons in space, in the atmosphere, and in the common waters of the oceans. Duration of this pledge is set out as that period of time until one of these three nations serves 90-day notice that it will resume testing.

The treaty will not do certain things. It will not stop signatory nations from making nuclear weapons of any kind; nor maintaining their present or increased arsenal of nuclear weapons; nor use of such weapons in defense of any signing nation or its allies against aggression. It will not halt preparation for any of the prohibited test explosions right down to the point of pressing the button; nor will it stop underground test explosions. It will not totally prevent further poisoning of the atmosphere by radioactive fallout because neither France nor Red China are parties to it and both are engaged in active nuclear weapons development and testing pro-

DURATION OF TREATY

It is provided that any party to the treaty has a right to withdraw from it upon 3 months' notice if it decides that its supreme interests are jeopardized. A more likely method of termination, however, is a summary and unceremonious breaking of the treaty by the Soviet Russians the very minute such action suits their purpose better than continuing under its terms. This point will be

developed at greater length later in my remarks.

The treaty was agreed to by the three major nations in July of this year. However, the idea of a limited test ban agreement was first advanced to Soviet Russia in April, 1959, by President Eisenhower, with British support. His letter proposal called for a prohibition on atmospheric tests up to 50 kilometers, without on-site inspections being required. The Soviets rejected the Eisenhower proposal.

FACTORS UNDERLYING HRUSKA DECISION TO FAVOR RATIFICATION

Without exaggeration, Mr. President, the ultimate issues raised by this debate go to the existence of this Nation and the principles for which it stands. They go to the very existence of our civilization which it is our purpose to preserve against all obstacles and all enemies. Also they go to the aspirations of men of good will everywhere in the world, that the far prospect of eventual peace-however dim-is something more than a cruel deception; and that the immediate cessation of further radioactive fallout-however small-is a substantial gain for humanity for whatever period it lasts, however long that may be. It is in the spirit of hope, matched by an alertness to every potential danger and a determination to keep ready our massive military power and to take other safeguard steps, that I will cast my vote in favor of ratifying this limited test ban treaty.

This decision has been reached against a background of some doubt and brutal realism. It was reached with difficulty. This decision has been shaped by all the participants in this historic debate—a debate that has indeed been constructive, informative, and exhaustive.

Chief among these participants is President Kennedy, whose letter of September 10 set out eight "unqualified and equivocal assurances to the Members of the Senate, to the entire Congress, and to the country." These eight points verified much of the testimony of Secretary of State Rusk and others who appeared in person before the Foreign Relations Committee, and who gave interpretations of language and outlined our Nation's intended course of action under the treaty.

My decision has also been greatly influenced by the testimony of the Joint Chiefs of Staff, and by their considered judgment that—on sober balance—the strengths of the treaty outweigh its weaknesses, that the benefits exceed the risks. Our military posture will unquestionably be affected by the test ban. But it will not be compromised.

And I would be gravely remiss if I did not acknowledge, as well, my debt to those who have in dedicated fashion conducted and participated in the committee hearings and who have engaged in the debate in this Chamber. This includes those who have opposed the treaty outright; and those who will, in the end, cast their votes against it. To cite just one example, the questions so well posed and the arguments so eloquently advanced by my colleague. Sen-

ator Curtis. He, like every Senator recognizing many vulnerabilities in the treaty, is also concerned about the paramount issue of our national safety and security. In speaking out fortherightly, he has served the Nation's best interest. In fact, all the voices of doubt and opposition have been articulate and responsible. They bespeak the convictions of dedicated patriots. One may disagree with their final judgment—as I do—but their sense of high obligation cannot be faulted. I pay them sincere and grateful tribute.

But beyond all else, Mr. President, my decision has been shaped—my thoughts supported and sustained—by the most important of all the participants in the debate: the American people. Never, in my years of public service, has such an outpouring of thoughtful, reasoned letters reached my desk as those relating to the issue before us. About half favor ratification; about half oppose it; but all of them reflect, in every considered

word, the same deep concern.

Taken together, they have helped to cut through the Infinite complexities of this issue to what is simple and essential. The writers of these letters seek a just peace and, more particularly, desire an end to the continued contamination of the atmosphere by radioactive debris. That the menace to future generations is yet unknown serves merely to heighten the sense of dread. But these letters both for and against express, at the same time, a second theme: a practical reliance on a strong right arm of national defense—powerful and ready.

defense—powerful and ready.
On this issue, the prerequisites of public policy correspond to the American character itself: a surefooted idealism guided by practical and prudent com-

monsense.

This is the precise balance that I have tried to strike in my own thinking. It has not been easy. Ease of mind craves certainties. And in this matter there are many uncertainties. The effect of the treaty on weapons development, on maintaining our present superiorities, on closing existing gaps, on the peaceful uses of nuclear explosions, on the progressive expansion of human knowledge itself—in all these vital areas of concern, unequivocal assurances are not forthcoming. There are only questions and doubts, only tentative and limited judgments, virtually all of which predated initialling of this treaty, and none of which are solved or made final by it.

INITIAL MISCIVINGS ON TWO KEY POINTS

When the treaty was first submitted, this Senator's preliminary study led to grave doubts on two key points which I

publicly expressed at that time.

The first was this: In the event of a major nation breaking the treaty, whether we would be bound to wait out the 3 months before being freed from the terms of that document. During the hearings and in the President's letter it was made clear that in case the Soviet Union conducted tests in violation of the treaty, these United States retained the right to resume testing forthwith. It is also pledged that this country will main-

tain a posture of constant readiness for such resumption of testing.

The second point upon which this Senator declared keen misgivings was the same as that raised by former President Eisenhower: Does the treaty impose any inhibition on the use of nuclear weapons by us in case of war or aggression against us or any of our allies? The answer was a clear "No," clear to the Senate, clear to the American people, and perhaps most important of all, clear to the Soviet Union. This clarity was expressed in point 4 of President Kennedy's letter by his statement that "the treaty in no way limits the authority of the Commander in Chief to use nuclear weapons for the defense of the United States and its allies, if a situation should develop requiring such a grave decision."

Thus, the essential interpretations applied to each of these two points are now a part of the legislative history of the treaty. They are a part of the formal record. They are now in every practical sense a part of the substance of the treaty. On both scores, therefore, my initial concern has been relieved.

PRESIDENT KENNEDY'S EIGHT POINTS OF ASSURANCE

Each of the eight points set out in President Kennedy's September 10 letter addressed to the majority and minority leaders of the Senate, are likewise a part of the legislative history and of the formal record. They clear up a great many questions and objections placed on this subject. Mr. President, I ask unanimous consent that the text of these eight points contained in that letter be printed at this point in the RECORD.

There being no objection, the excerpt from the letter was ordered to be printed in the Record, as follows:

1. Underground nuclear testing, which is permitted under the treaty, will be vigorously and diligently carried forward, and the equipment, facilities, personnel, and funds necessary for that purpose will be provided. As the Senate knows, such testing is now going on. While we must all hope that at some future time a more comprehensive treaty may become possible by changes in the policies of other nations, until that time our underground testing program will continue.

2. The United States will maintain a pos-

2. The United States will maintain a posture of readiness to resume testing in the environments prohibited by the present treaty, and it will take all the necessary steps to safeguard our national security in the event that there should be an abrogation or violation of any treaty provision. In particular, the United States retains the right to resume atmospheric testing forthwithit the Soviet Union should conduct tests in violation of the treaty.

3. Our facilities for the detection of possible relations of this treaty will be except

3. Our facilities for the detection of possible violations of this treaty will be expanded and improved as required to increase our assurance against clandestine violation

by others.

4. In response to the suggestion made by President Eisenhower to the Foreign Relations Committee on August 23, 1963, and in conformity with the opinion of the legal adviser of the Department of State, set forth in the report of the Committee on Foreign Relations, I am glad to emphasize again that the treaty in no way limits the authority of the Comamnder in Chief to use nuclear weapons for the defense of the United States and its allies, if a situation should develop

requiring such a grave decision. Any decision to use such weapons would be made by the United States in accordance with its constitutional processes and would in no way be affected by the terms of the nuclear test ban treaty.

5. While the abnormal and dangerous presence of Soviet military personnel in the neighboring island of Cuba is not a matter which can be dealt with through the instrumentality of this treaty, I am able to assure the Senate that if that unhappy island should be used either directly or indirectly to circumvent or nullify this treaty, the United States will take all necessary action in response.

6. The treaty in no way changes the status of the authorities in East Germany. As the Secretary of State has made clear, "We do not recognize, and we do not intend to recognize, the Soviet occupation zone of East Germany as a state or as an entity possessing national sovereignty, or to recognize the local authorities as a government. Those authorities cannot alter these facts by the act of subscribing to the test ban treaty."

7. This Government will maintain strong weapons laboratories in a vigorous program of weapons development, in order to insure that the United States will continue to have in the future a strength fully adequate for an effective national defense. In particular, as the Secretary of Defense has made clear, we will maintain strategic forces fully insuring that this Nation will continue to be in a position to destroy any aggressor, even after absorbing a first strike by a surprise attack.

8. The United States will diligently pursue its programs for the further development of nuclear explosives for peaceful purposes by underground tests within the terms of the treaty, and as and when such developments make possible constructive uses of atmospheric nuclear explosions for peaceful purposes, the United States will seek international agreement under the treaty to permit such explosions.

Mr. HRUSKA. Mr. President, it is plain that these assurances are stated in an "unqualified and unequivocal" fashion. My reliance upon them is implicit in their being made sincerely and with the President's firm determination to follow through unswervingly. It is to be hoped that he will be more steadfast and undeterred in this instance then he has been in some other areas of foreign policy in which he has engaged, but which he has not been able to bring to successful conclusion.

U.S.S.R. AS CHAMPION TREATY BREAKER

Many of those speaking to the matter of ratification of this treaty have pointed out that we cannot trust the Soviet Union to abide by its terms. This Senator is in full agreement with that view. The U.S.R. on innumerable occasions has proven itself utterly incapable to abide by treaties it has undertaken.

If this treaty were dependent upon Soviet good faith, then I would vigorously oppose it; I would vote against it in that case. But after careful and lengthy consideration I am persuaded that the treaty does not depend upon trusting the Russians. This is so because of the safeguards provided in the President's letters, and our ability to implement them.

In fact, my own expectation is that sooner or later the Soviet's abrogation of the treaty in a way not provided by its terms, will terminate its tenure. All past

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history counsels us to anticipate such violation. Being thus forewarned, we are forearmed. All text of Communist doctrine, put us on clear warning that according to the perverse course of Communist thinking, no treaty or international obligation can ever take precedence over the imperatives of world Communist imperialism. They hold that those things alone are good which advance the goals of the so-called Socialist commonwealth. If a treaty solemnly signed becomes burdensome or undesirable, the obligations contained in it are forthwith disregarded and not observed.

In 1955, the Senate Subcommittee on Internal Security, in Senate Document No. 85, published a study entitled "Soviet Political Agreements and Results." Nearly a thousand treaties and agreements, both bilateral and multilateral, entered into by the U.S.S.R. with countries all over the world were examined. The Senator from Missispipi [Mr. Eastland], chairman of the subcommittee, wrote in the preface:

The staff found that in the 38 short years since the Soviet Union came into existence, its Government had broken its word to virtually every country to which it ever gave a signed promise * * * it keeps no international promises at all unless doing so is clearly advantageous to the Soviet Union. I seriously doubt whether during the whole history of civilization any great nation has ever made as perfidious a record as this in so short a time.

In fact, treatybreaking has been an instrument of national policy with the U.S.S.R. since it came into existence. Bainbridge Colby, who was President Woodrow Wilson's Secretary of State, declared:

The responsible leaders of the regime have frequently openly boasted that they are willing to sign agreements and undertakings with foreign powers while not having the slightest intention of observing such undertakings or carrying out such agreements.

As long ago as 1919 one of Lenin's lieutenants, Zinoviev stated:

We are willing to sign an unfavorable peace. * * * It would only mean that we should put no trust whatever in the piece of paper we should sign. We shall use the breathing space so obtained in order to gather our strength so that the mere continued existence of our Government would keep up with the worldwide propaganda which Soviet Russia has been carrying on for more than a year.

Later this was updated by Joseph Stalin who put the Communist diplomatic philosophy even more bluntly, and in this fashion:

Words must have no relations to actions * * * otherwise what kind of diplomacy is it? Words are one thing, actions another. Good words are a mask for concealment of bad deeds. Sincere diplomacy is no more possible than dry water or wooden iron.

Senate Document No. 85 of the 84th Congress was brought up to date in Senate Document No. 125 in the year 1959. When the treaty now before us was initialed, this Senator requested Chairman Eastland of the subcommittee to have that second printing to be brought up to date, which was done.

This 1963 "Supplement No. 1" shows the U.S.S.R. record of perfidy in the matter of treaties is consistent with the 38 years of broken promises reported in Senate Document No. 85.

Quite often we hear of "a new spirit" which comes about over the U.S.S.R. So it is "the spirit of Geneva" in 1955; or the "spirit of Camp David" at a later time, and so on. These spirits are supposed to denote a change of heart, a new direction, a mellowing, or a maturing to a point where there are evidence that the U.S.S.R. wants to become a respectable, law-abiding member of the family of nations.

Such thoughts and hopes have been expressed here on the floor of the Senate during this current debate.

In truth and in fact, however, there is no such change. There has always been and there is right now a steadfast resolution and obsession in the minds and in the program of the Soviets. It is geared to the eventual domination by the Communists of the entire world.

Chairman Eastland in his foreword to Senate Document No. 125 of 1959 stated: Communism is not an evil thing only because it has been controlled by evil men

since it first rose to power in 1917. It is organically evil. You must renounce bourgeois morality, you must become an evil man before you can become a good Communist. You must be a liar, a cheat, and probably a spy, before you can represent a Communist nation in international diplomacy. You must have no more regard for honor when you sign an agreement on behalf of your country than a forger does when he puts a name on a check.

In 1958, the book "Masters of Deceit" was published. Its author is J. Edgar Hoover, widely considered as the foremost authority upon the subject of communism—its nature and its ways. Here is a declaration on the point which we are now considering, taken from his book:

The Red Fascists have long followed the practice of making use of democratic liberties: Elections, lawful adjudication and propaganda and free speech, press and assembly. Their basic premise: reap every advantage possible. However, if it will help, don't hesitate to use illegal methods, such underground operations; terrorism. espionage, sabotage, lying, cheating. "We have never rejected terror on principle, nor can we do so. Terror is a form of military operation that may be usefully applied," wrote Lenin. Morality is strictly a bourgeois device. To the Communists everything that promotes the revolution is moral, legal, and beautiful.

Many people are confused by the party's abrupt twists and turns, such as denouncing the United States as an imperialist nation, from 1939 to 1941. Then overnight, after Russia's entrance into the war, halling America as a great ally. Communists often look like frightened rabbits chasing back and forth.

But in reality these changes in the party line are merely shifting tactics all designed to promote the ultimate goal of world revolution. They are not changes in heart.

In their splendid book, entitled "What We Must Know About Communism," authors Harry and Bonaro Overstreet state in regard to Communist doctrine:

As for treatles signed and broken, we must again take stock of a basic difference of viewpoint. Having signed these treatles in good faith, we feel that the Communists, by violating them, have clearly manifested bad faith.

But they have never conceived of good faith as possible between Communists and non-Communists. Bad faith, therefore, is an equal impossibility. The signing of a treaty across the division line prescribed by the Marxist-Leninist aversion of the class struggle is an act of expediency. The breaking of it is also precisely that—and nothing more.

Many more citations and examples could be cited. Those which have been set out should be quite conclusive in their own right. With most of the people of America they are reminders and refreshers of what the Nation has long been aware.

This Senator has gone into this phase of the unreliability on the U.S.S.R. in the field of treaties to make certain without fail that the Senate in voting ratification of this treaty has been thoroughly and completely aware of untrustworthiness of one of the major signers of this historic document.

I repeat, this record of perfidy leads me to one overriding conclusion: Were the test ban treaty dependent, in any degree, on Soviet good faith—if it were contingent upon our trusting the Soviets—then I would flatly oppose it. But we know that it is not. We have the testimony of our military and scientific chiefs, the Secretaries of State and Defense, and the assurance of the President, to the effect that our national safety and security rest on two foundations, and two alone: Our effective detection systems and our state of instant readiness, over and above our basic posture of massive military power.

I do not question the sincerity of these assurances. I accept them. I take pride and comfort from such evidence of American might, and of the skills and devotion of our Nation's scientific personnel. More pride perhaps—and certainly more confidence—than was shown by the President himself as recently as March 2, 1962. These were his words to the Nation on that occasion:

But in actual practice, particularly in a society of free choice, we cannot keep top-flight scientists concentrating on the preparation of an experiment which may or may not take place on an uncertain date in the undefined future. Nor can large technical laboratories be kept fully alert on a stand-by basis waiting for some other nation to break an agreement. This is not merely difficult or inconvenient—we have explored this alternative thoroughly, and found it impossible of execution.

Let me stress that final sentence: "We have explored this alternative thoroughly, and found it impossible of execution." And as for the extent to which this treaty or an uninspected test ban can be truly and effectively self-policing, these were the President's views as expressed at his news conference of February 7, 1962:

We will support the passage of an effective treaty which provides for effective inspection, but we cannot take less in view of the fact of our experience of the past months where it takes us many months to prepare for tests in the atmosphere. The Soviet Union prepares in secret. Unless we have adequate protection against a repetition of that incident, any such test agreement obviously would be extremely vulnerable.

Do we now, as evidently we did not then, have adequate protection? Have the basic conditions, the irreducible essentials of national security, somehow changed? Are the two situations in some critical way incomparable—as some administration spokesmen have tried, with more bravery than logic, to argue? I am not persuaded by these attempts to evade the embarassing consequences of their own previous supersalesmanship. Nor am I persuaded, today, by the new version of the hard sell by which some of these same partisans are attempting to minimize the risks imbedded in the treaty before us.

This is, indeed, no time for salesmanship of any kind. It is, rather, a time for cool reason and hard logic. This is what I have looked for in the considered testimony of the Joint Chiefs—for example, in the official brief filed at the behest of the junior Senator from the State of Washington [Mr. Jackson], specifying the criteria for a truly ready alert and for a state of instant preparedness to resume profitable tests. Reason, logic, and the judicious balancing of risks is what I have looked for, Mr. President. And this is what I have found in the official record—sufficient, in my judgment, to deem these risks acceptable.

But from this disturbing evidence of contradictions and of uncertainties, in the President's own words, let us draw the appropriate conclusions. No one who is sincerely dedicated to this Nation's enduring interests—no one, surely, in this Chamber—can take pleasure simply in recitations which may be embarrassing to the administration's highest officers. But let no one shrink from the duty of holding them to their words and their solemn assurances. Under the terms and the inherent risks of this treaty, let these officials be on notice: They—no less than the Soviets—are on trial.

They have given us assurances that our detection system will be rigorously maintained and constantly improved; that all the arts and skills of underground testing, for both military and peaceful purposes, will be developed to the limits of our resources; that our experimental facilities and our scientific manpower will be sustained in a state of maximum capability and instant readiness. And so I repeat and reemphasize: By making these assurances, they have entered into a solemn pact with the American people on the vital question of our national security. The Nation will hold them to their word.

This, finally, has been the lasting strength of the "historic and constructive debate" for which the President originally called. Never has this Senate, this Congress, or this Nation been more fully in a state of alert. Never have the risks of a limited test ban been more widely or more deeply understood. We may once again fall victim to duplicity—but not soon again to our own delusions.

And because we now comprehend the risks, we may judge them to be—on balance—acceptable.

. Without deluding ourselves as to the purposes other nations might have in

signing this limited treaty, it is nevertheless clear that our support of it will assure, at least for a limited time, a reduction of radioactive contamination of the seas, the atmosphere and outer space.

Should we withhold our approval, the likelihood of continued atomic testing seems inevitable. It may yet be resumed for reasons of compelling national security, but mankind is due a breather. This is an opportunity, in other words, to test intentions rather than bombs as we keep our powder dry.

Thus, in ratifying this limited treaty, we do hope that we may finally have embarked on the perilous road toward a just and lasting peace. No one can say in certainty that we have done so. I do not. But I do say that we venture forth in the name of all that is most worthy in the human spirit. Sustained by that conviction, I am prepared to support the treaty.

THE RUSSELL UNDERSTANDING

Having made that determination, Mr. President, we nonetheless must take all prudent steps to reduce any risks which may be incurred.

One very practical way in which we can reduce the risks is to approve the proposal of the Senator from Georgia [Mr. Russell] which would reserve to the Senate the right to ratify or reject future alterations in the treaty.

This is simply a reasonable precaution to restate, reaffirm, and protect the constitutional right of the Senate to advise and consent to international treaties. It would reaffirm the national policy of having a branch of the Congress, representing the people, pass on the merits of amendments to the treaty after due and widely publicized disclosure and debate. It would be a warning against the use of executive agreements in which the people through the Senate have no voice and sometimes no knowledge till long after the fact.

Those who oppose the Russell amendment protest that it is not necessary; that the Secretary of State has testified that any amendment will be subject to Senate approval. If that is the case, Mr. President, how can they object to having it spelled out? Surely it can do no harm. And it would have the simple virtue of saying what we mean and what the fact is.

As the Senator from Georgia has pointed out, his language is identical to that in the International Atomic Energy Act. It was deemed important then; surely it is equally important now.

It is my hope, Mr. President, that the Senate will support the Russell understanding. Armed with such an understanding, the treaty would be significantly strengthened.

"A FIRST STEP TOWARD PEACE"

Often during this current debate reference has been made to this treaty as a first step toward peace. However, repeatedly our attention has been called to the fact that it is not a widely encompassing measure; that not too much is covered by it nor can too much be expected from it. After all, it is very limited in its scope. Nevertheless, this first step would bring about benefit to the world by not having the air polluted

with radioactive poison, no matter how brief the respite may be.

But in ratifying this treaty, the Senate endorses only the content of this treaty and nothing more. It surely does not commit itself to approve further steps which the President may make.

All of us can hope that the treaty is indeed a first step toward peace. But most emphatically it does not follow that the treaty is a first step toward approval of all other treaties and foreign policy changes which the President may see fit to lay before the Congress and the country.

This Senator will most emphatically hold to this foregoing thought. He will consider himself totally free to consider any amendment of the present treaty or any sequel to it altogether clear and separately from their ratification of the treaty.

GAINS OUTWEIGH RISKS

Mr. President, I have attempted to spell out as carefully as I can not only the reasons for voting for the treaty, but the risks and dangers which accompany such a decision.

From the time the treaty was initialed at Geneva, it has been apparent that the problem confronting the Senate was to weigh the advantages against the risks and thus arrive at its decision.

This has been done in the kind of free and open discussion which characterizes our system of government. All points of view have been heard. The result is clear: the advantages, not only to our Nation, but to the world, justify our ratification. We can do no less.

Mr. BYRD of Virginia. Mr. President, no man wants peace in the world more than I do. I abhor war. I know the horrible destructiveness of nuclear conflict. My highest purpose in the Senate of the United States is to preserve the sovereignty and the system of this Nation.

I attribute the same motives to all Members of Congress. I am aware of the proposed treaty's objectives as they have been stated by the President. The treaty itself says the purpose is to ban nuclear tests in the atmosphere, outer space and underwater.

I have never given a matter before the Senate more thoughtful study and consideration than I have given this treaty. I wish I could vote for its ratification in the belief that it would be in the best interest of the country.

But I do not believe entering into such a treaty—as it stands—with the Soviet Government would serve our national security. I am fearful that it will weaken, if not undermine, our defense. I cannot conscientiously consent to ratification as it is proposed.

Before reaching this decision I listened to the testimony, participated in the discussions, and studied the hearing transcripts; and I have called on my 30 years of experience in the Senate observing world affairs and our position in them

Through these years I have served on the Armed Services Committee and its predecessor, the Naval Affairs Committee; I helped write our atomic energy control legislation; and I was an original member of the Joint Committee on Atomic Energy.

It is contended that the proposed treaty is a "small step" toward world peace and relieving cold war tensions, and perhaps toward disarmament. From experience I have learned that proposals in the name of peace do not always lead to peace.

We have Neville Chamberlain's "umbrella" experience with Hitler in the prelude to World War II, if a reminder is needed. The proposed treaty may tend temporarily to lessen international tensions, but the vital question is its ultimate

effect on our security.

Ratification of the treaty in its present form would give me great concern. The Soviet Union would be one of three principal parties to it. We know that destruction of our system is a primary requirement in the Soviet aim for world conquest.

Soviet Chairman Khrushchev, himself, has said he intends to "bury" us. There is just reason to assume that the Russians think this treaty will work to their advantage, or that it can be turned to that end. Why would they be interested in it otherwise?

There is nothing in Soviet history which would serve as a basis for faith that the Kremlin would enter into a treaty with us at this time and keep it if they did not think it would serve their objectives to our disadvantage.

Secretary of State Dean Rusk, testifying on the treaty proposal, before the Senate Foreign Relations Committee, August 12, 1963—page 18 of the hearings—said:

We have no basis yet for assuming a fundamental change in Soviet objectives.

We can expect Soviet Russia to disregard the treaty when breaching it would serve Soviet purposes. Former President Truman has told us that the Soviet Union has violated 50 of the last 52 or 53 treaties it has entered into.

A State Department memorandum on this subject, dated August 22, 1963, cited conventions of convenience—such as the Universal Postal Convention—to which the Russians are adhering, but beyond these, it said:

It is perfectly clear that the Soviet Union has violated a large number of major international agreements and treaties. Their record is well known.

We have already been victimized by the Soviets under one nuclear test ban, and there is reason to suspect that our position with respect to nuclear weapons, as compared with the Russian position, suffered. This fact cannot be overlooked.

Under unilateral "statements of intent" the United States and Great Britain entered into a so-called "moratorium" with the Soviets in 1958. As might have been expected the Soviets exploited the moratorium while we and the British honored it.

For more than 2 years the Russians used the moratorium secretly to build up their experimental and test devices, and when they were ready, in September 1961, they exploded them—the tri-party moratorium notwithstanding.

On March 2, 1962—only about 18 months ago—President Kennedy, in a nationwide broadcast—Congressional Record, March 5, 1962, page 3136—said:

On September 1 of last year, while the United States and the United Kingdom were negotiating in good faith at Geneva, the Soviet Union callously broke its moratorium with a 2-month series of more than 40 nuclear tests.

Preparations for these tests had been secretly underway for many months. Accompanied by new threats and new tactics of terror, these tests—conducted mostly in the atmosphere—represented a major Soviet effort to put nuclear weapons back into the arms race.

Many of these tests were aimed at improving their defenses against missiles—others were proof tests, trying out existing weapons systems—but over one-half emphasized the development of new weapons, particularly those of greater explosive power.

And in that same speech to the Nation President Kennedy said:

I must report to you in all candor that further Soviet series, in the absence of further Western progress, could well provide the Soviet Union with a nuclear attack and defense capability so powerful as to encourage aggressive designs. Were we to stand still while the Soviets surpass us—or even appear to surpass us—the free world's ability to deter, to survive, and to respond to an allout attack would be seriously weakened.

The President also said:

The fact of the matter is, we can not make similar strides without testing in the atmosphere as well as underground. For in many areas of nuclear-weapons research we have reached a point where our progress is stifled without experiments in every environment.

The purpose of the President's 1962 speech was to advise the Nation that since the Soviets had violated the moratorium, it was necessary for the United States, to protect its own security, to conduct further tests in the atmosphere as soon as necessary preparations could be made.

Months later these U.S. tests were made, and able man that he is, Gen. Thomas S. Power testified on September 6, 1963, before the Armed Services Preparedness Subcommittee—page 46 of transcript—that:

One of the most important things I think we discovered is the great void in our knowledge.

President Kennedy, in his March 1962 speech, said he was ordering further testing by the United States after:

Having observed the Soviet Union's refusal to accept any agreement which would inhibit its freedom to test extensively after preparing secretly.

What has happened with respect to our confidence in the Soviets since the President made that statement 18 months ago? Apparently not very much. Secretary Rusk told the Senate Foreign Relations Committee last month—August 12, 1963, page 19 of the treaty hearings—that:

Although we hope for compliance, we can not discount the possibility that the Soviet Union may violate the treaty. We shall be on the alert for any violations, and we have a high degree of confidence in our ability to detect them.

We have proposed control of atomic weapons repeatedly—in one way or another—since Bernard Baruch's first proposal in 1946, but with two exceptions we have always insisted on effective inspection. The Russians have opposed effective inspection.

The two exceptions to our effective inspection rule are the 1958 "moratorium," and the treaty now proposed. We know what happened under the moratorimum, without inspection. Now we are asked to forgo meaningful inspection again and rely on other "means of detection."

The State Department memorandum of August 22, 1963—page 968 of the hearings on the pending treaty—says:

As the President and the Secretary of State have made clear, the United States, in entering into the test ban treaty, is not relying upon the good faith of the Soviet Union, or upon Soviet respect for treaties and international law.

The United States will rely for its protection upon its own ability to detect Soviet violations and to maintain a military and scientific posture that will deny to the Soviet Union any gains that might accrue from a violation of the treaty—

According to the State Department memorandum.

In that statement the State Department seems to be saying it expects the Soviets to violate the treaty, and if they do we are to rely on our ability to detect violation and deny them any gains from the violations.

But the product or use of our detection and intelligence to date does not reassure me. I am not sure whether the deficiencies lie in the absence of vital information, its evaluation, or its use, or whether we are deficient in all three.

The President, himself, said Soviet preparations for the tests that shattered the moratorium had been "secretly underway for many months." If we had early information about missiles on Cuba—90 miles from Florida—we were very deficient in its use.

This is part of the recent public record of detection and intelligence on which we are to rely. For security reasons little can be said on the subjects of intelligence and detection, and discussion of detection and identification of nuclear tests is necessarily technical.

But on these subjects I quote one of the "safeguards" on which the Joint Chiefs of Staff conditioned their approval of the treaty—page 24 of the September 9, 1963, report by the Armed Services Preparedness Subcommittee. The Joint Chiefs said we need—

Improvement of our capability within feasible and practical limits, to monitor the terms of the treaty, to detect violations, and to maintain our knowledge of Sino-Soviet nuclear activity, capabilities, and achievements.

The Joint Chiefs of Staff amplified the criteria they wanted as follows:

(a) The current capability of the United States to detect and identify nuclear tests conducted by the Sino-Soviet bloc must be improved to the extent it is both feasible and remunerative. (Special proposals for this purpose are currently under consideration.)

(b) A vigorous research and development must be pursued in order to improve equip

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ments and techniques for nuclear test de-tection and identification.

(c) Conventional intelligence sources must continue to complement the scientific in-telligence techniques.

We are asked to rely on "our ability to detect Soviet violations," when, according to the Joint Chiefs of Staff, our detection capabilities are still so far short of requirements. How long will it be before these promised safeguards are developed?

The fact that the Joint Chiefs of Staff conditioned their approval of the pro-posed treaty on the effective implementation of "safeguards" designed to reduce its military "disadvantages and risks" caused the Preparedness Subcommittee deep concern.

After the subcommittee heard Gen. Maxwell D. Taylor, Chairman of the Joint Chiefs, Senator Henry M. Jackson, a very distinguished Member of this body,

moved that: The Joint Chiefs of Staff submit to the Senate Armed Services Committee * * a statement of the specific requirements to implement the safeguards proposed by the Joint Chiefs reducing the risks and disadvantages of the limited test ban treaty, which safeguards are set forth in the statement presented by the Chairman of the Joint Chiefs of Staff to this committee on August

14, 1963, as follows:

Recognizing the * * * disadvantages and risks, the Joint Chiefs of Staff believe that they can be reduced through certain safeguards. These safeguards include:

(a) The conduct of comprehensive, aggressive, and continuing underground nuclear test programs designed to add to our knowl-edge and improve our weapons in all areas of significance to our military posture for the

future.
(b) The maintenance of modern nuclear laboratory facilities and programs in theore-tical and exploratory nuclear technology which will attract, retain and insure the continued application of our human scientific resources to these programs on which continued progress in nuclear technology depends.

(c) The maintenance of the facilities and resources necessary to institute promptly nuclear tests in the atmosphere should they be deemed essential to our national security or should the treaty or any of its items be

abrogated by the Soviet Union.
(d) The improvement of our capacity, within feasible and practical limits, to moni-tor the terms of the treaty, to detect violations, and to maintain our knowledge of Sino-Soviet nuclear activity, capabilities, and achievements.

Roswell Gilpatric, Deputy Secretary of Defense, and General Taylor responded to this Committee motion with assurances that safeguarding steps have been—or will be—taken; and subsequently the assurances were repeated by the President.

The effect of this recognition that such comprehensive safeguards are required confirms my fear that military disadvantages to the United States are assovantages to the officer states are asso-ciated with the treaty. Some of the dis-advantages considered by the subcom-mitee—pages 7 and 8, of subcommittee report of September 9, 1963—included:

1. The possibility that the United States could be left "unable to duplicate Soviet achievements in very high yield weapon technology"

2. The possibility that the United States would be made "unable to acquire neces-

sary data on effects of very high yield weapon atmospheric explosions."

The possibility that the United States would be made "unable to acquire data on high altitude nuclear weapons effects."

4. The possibility that the United States would be made "unable to determine, with confidence, the performance and reliability of any ABM (antiballistic missile) developed without benefit of atmospheric system tests."

5. The possibility that the United States would be made "unable to verify the ability of its hardened underground second-strike missile systems to survive close-in high-yield nuclear explosions."

6. The possibility that the United States would be made "unable to verify the ability of its missile reentry bodies—under defensive nuclear attack-to survive and to penetrate to target, without the opportunity to test nose cone and warhead designs in a nuclear environment, under dynamic reentry conditions.

7. The possibility that the "treaty would provide the Soviet Union an opportunity to equal U.S. accomplishments in submegaton

weapon technology."
8. The possibility that the "treaty would deny to the United States a valuable source of information on Soviet nuclear weapons capabilities."

I am not a member of the Armed Services Preparedness Subcommittee, as such, of which Senator John Stennis is chairman; but I am a ranking member of the full Armed Services Committee, of which Senator Richard Russell is chairman.

In this capacity I was privileged to participate in the subcommittee's exhaustive inquiry into the military aspects of the proposed test ban treaty; and because of my deep concern over the treaty I did participate in the hearings.

And the subcommittee report of September 9, 1963, pages 4 and 5 found that:

Since the early 1960's the deterrent strategy of the United States has been based substantially on second-strike missile systems which can survive a massive first strike by a nuclear armed enemy and still retain the ability to retaliate in such force as to destroy the attacker.

By mid-1970's this Nation's nuclear deterrent will probably reside primarily in landand-sea-based missile systems designed to achieve that degree of survivability.

To date, only Polaris has been subjected to a full scale test, including the explosion of the nuclear warhead. Minuteman, Atlas,

and Titan have never been so tested.

Nor have models of the base complexes of hardened underground Minuteman and Titan systems been subjected to close-in high yield nuclear explosions to prove the adequacy of their design.

Nothing impressed me more in the long hearings held than the testimony of Gen. Thomas S. Power. General Power is not only Commander of the U.S. Strategic Air Command; he is also director of the Joint Strategic Target Planning Staff.

In these capacities General Power is the man responsible for writing war plans under which we would retaliate if attacked. He did not equivocate. His testimony was forthright, clear, and to the point. I quote directly from Gen-

eral Power, as follows. He said:

I am not in favor of the test ban treaty. I do not think it is in the best interests of the United States.

I feel that we have military superiority now, and I feel very strongly that this had resulted in a world that has been free from

nuclear warfare, I have a lower confidence factor that we can and will maintain that military superiority under the test ban than I have under a condition in which we do not have a test ban.

Along the same line, later in his testimony, General Power answered one of my questions with these statements:

I think the reason we haven't had a war is simple. We have had overwhelming superiority, and whenever somebody examined the feasibility of attacking the United States, they immediately had to reject it because it was ridiculous.

I think that is a sound position to hold if you can.

Overwhelming capacity to retaliate is one of the chief deterrents to war.

General Power, in those portions of his testimony released by the subcommittee, made these statements:

We have never completely tested any of the nuclear weapons in SAC's arsenal. We have not tested any of the operational warheads in our inventory. That includes the missiles and the bombs.

The only way you can prove a weapon system is to take it out of stockpile in a random pattern and let the tactical unit take it out and detonate it. * * * Unless you test everything that is in your arsenal, you are never certain, and the stakes are so high I feel we must be certain.

I have to deal with proven data (if it is not available) I do not have a high confidence factor that I have a sound plan. We are dealing with the security of the United States, and if the facts can be obtained I want to have them.

General Power took the position that the fact that we are not full testing now is voluntary; and that this is something far different from being foreclosed from obtaining vital data under a multipower treaty.

As the man responsible for writing our strategic war plans, General Power has access to all of the intelligence available in this country with respect to the Soviet Union; and much of his testimony necessarily must be classified.

I greatly regret it was necessary to delete from the transcript of testimony some of the most startling things he said.

When a man of his knowledge, responsibilities, and courage says this treaty is not in the best interests of the United States, as a Member of the U.S. Senate, I cannot take such professional advice

I am mindful also of my duties as a member of the Armed Services Committee which has legislative responsibility for the Nation's common defense. The function of the subcommittee is to over-see the state of our preparedness. The adverse effect on the strength of our defense which could arise from the military disadvantages of this treaty must be considered.

The subcommittee took 2,800 pages of testimony on the proposed test ban treaty from 24 highly qualified witnesses in order that the Senate might have the best information on the military aspects involved.

While the subcommittee did not have primary jurisdiction over the treaty in the Senate, five of its seven members, without reservation, reached these conclusions:

September 19

1. From the evidence we are compelled to conclude that serious-perhaps even formidable—military and technical disadvan-tages to the United States will flow from ratification of the treaty. At least it will prevent the United States from providing our military forces with the highest quality of weapons of which our science and technology are capable.

2. Any military and technical advantages which we will derive from the treaty do not, in our judgment, counterbalance or outweigh the military and technical disadvan-tages. The Soviets will not be similarly inhibited in those areas of nuclear weaponry where we deem them to be inferior.

3. Admittedly, however, other important factors-such as foreign policy, international affairs, and relations with other countries-are relevant in an overall assessment of the treaty.

4. These are not within the scope of this report. When they are considered, as they must be, each individual must reach his own judgment about the wisdom and desirability of the treaty on the basis of personal philosophy, past experience, current knowledge, and relative weight which he assigns to the various factors involved.

In arriving at my own decision with respect to this proposed test ban treaty I found no practical justification for believing it would lead to any reduction in the arms race in the foreseeable future: there is more reason to think it may be expanded.

Adm. Arleigh Burke, former Chief of Naval Operations and member of the Joint Chiefs of Staff, testifying before the Preparedness Subcommittee on August 27, 1963, took the position that:

Under circumstances which make it more difficult for us to determine Soviet progress, the treaty might serve to "heighten, rather than reduce, tensions and suspicions if growing uncertainty develops."

President Kennedy, in a letter of September 10, 1963, to Senators Mansfield and Dirksen-page 15915, Congres-SIONAL RECORD, September 11, 1963said:

We will maintain strategic forces fully insuring that this Nation will continue to be in a position to destroy any aggressor, even after absorbing a first strike by a surprise attack.

The Secretary of State, testifying before the Foreign Relations Committee on August 12—page 18 of the hearings-

We are still engaged in a contest between free choice and coercion.

Senator Jackson, although announcing he would support the treaty-speaking from experience on both the Armed Services and Atomic Energy Commit-tees—told the Senate on Friday, September 13-page 16082 of the Congres-SIONAL RECORD—that:

Efforts to limit the spread of nuclear weapons deserve our serious attention. I believe the role of the treaty in inhibiting proliferation has been generally overesti-

General Power told the Preparedness Subcommittee that he didn't see "how you can arm and disarm at the same Admiral Burke told the same committee that in essence the treaty is self-contradictory, in that the-

Discussions of it imply a mutual sincerity of purpose, and yet demand that we take

proper safeguards to protect against a lack of sincerity.

I am aware of the widespread uneasiness over radiological fallout, but I do not profess to be an authority on the subject. For purposes of considering this treaty, I rely again on the testimony of General Power. I quote directly from his statement of August 19, 1963. He said:

I am thoroughly familiar with the radiation problem as one who writes a war plan and has to take fallout into consideration. I believe I have available to me the opinions of all of the experts.

There is by no means agreement amongst all the experts, but I do feel that, as a general statement, in some areas the danger of fallout has been greatly overexaggerated.

I think the type of testing that we have done or that we had contemplated doing is well within acceptable limits.

I fully realize the responsibilities of our position of leadership in the free world. I join in the hope that other nations which are not now free and democratic might find merit in our example. There is no doubt in my mind as to our high purposes.

I realize also that part of the Soviet technique is to use their propaganda to make us look bad, and to have us regarded in certain areas of the world as imperialistic warmongers. This has been going on for years; and we may expect its continuation whether we ratify the treaty or not.

Our record speaks for itself. States worthy of national status know we are not going to use nuclear weapons for imperialistic purposes. Ours are mature and moral motives. I am fearful of anything tending to relax our defense so long as the Soviets have such weapons, and continue to make them.

The first concern of our foreign policy should be the protection and preservation of our sovereignty, our freedom, and the integrity of our territory. No responsible nation could have a legitimate quarrel with this. This national responsibility is universal.

The Government of the United States owes it to the people of this country to formulate and pursue a foreign policy designed to use its resources first for the survival and well-being of the Nation and its citizens.

These are fundamental national interests. They come before consideration of the friendship of others, and certainly before consideration of the possibility that some nations may call us names or damn us otherwise. None of these iscomparable to the loss of freedom inherent in our sovereignty.

Let me emphasize that I do not impugn the motives of any responsible officer of this Government in his consideration of the proposed test ban treaty. To be for it or against it under present world conditions is a most difficult decision. I wish I could approve it.

But under all of the circumstances I have described I cannot within my conscience and my duty, as I see it, vote to ratify the treaty, without effective inspection, while the Soviets are in possession of such vast nuclear power.

Mr. LONG of Louisiana. Mr. President, will the Senator yield?

Mr. BYRD of Virginia. I yield.

Mr. LONG of Louisiana. I congratulate the Senator on what I believe to be a truly magnificent statement of his position. I am compelled to agree with the Senator, that the net effect of the treaty as between the United States and the Soviet Union will be that the Soviet Union will gain a great amount of leadtime on us in the development of new weapons. I suspect that that nation will gain, at the minimum, 1 year of leadtime in developing the most modern weapons.

The Secretary of Defense made a very fine statement to the effect that our Nation is very strong today. We are strong because we have stayed ahead of our adversaries in these matters. I believe that statements such as that of General Power indicate that the result of the treaty will be that, by virtue of developing the information the Soviets already have and manufacturing in large numbers the weapons which that information will make possible, and by cheating in one manner or another under the terms of the treaty, under a code of morality which exists there, as compared with the code of morality under which we are required not to cheat, the Soviets will gain great advantages that will imperil our security.

Mrs. SMITH. Mr. President, on September 16, 1963, I raised certain questions with respect to the wording of the nuclear test ban treaty. Very promptly and voluntarily and without prompting or request from me, the Secretary of State sent to me the answers of the Legal Adviser of the State Department to those questions.

Because I believe the Members of the Senate will be interested in those answers, I ask unanimous consent that the letter of the Secretary of State to me, dated September 18, 1963, and the memorandum of the State Department Legal Adviser, dated September 17, 1963, be printed at this point in the body of the RECORD.

There being no objection, the letters were ordered to be printed in the REC-ORD, as follows:

Hon. MARGARET CHASE SMITH,

U.S. Senate. DEAR SENATOR SMITH: The questions con-

cerning the language of the test ban treaty that you raised during the debate in the Senate Monday, and are printed at page 16204 of the Congressional Record for September 16, were called to my attention yesterday morning. I asked the Legal Adviser of the Department to prepare a memorandum dealing with these questions. I am pleased to send you that memorandum which represents the position of the executive branch on these points of law. I am also sending a copy of the memorandum to Senator FULBRIGHT.

Sincerely yours.

DEAN RUSK.

SEPTEMBER 17, 1963.

Memorandum for the Secretary. From: The Legal Adviser.

Subject: Questions raised by Senator Smith concerning the test han treaty.

You have asked me to prepare a memorandum responsive to the questions raised by Senator Smith concerning the language of the test ban treaty and printed at page 16204 of the Congressional Record for September 16, 1963. Senator Smith has grouped

her questions under Roman numeral head-For convenience, the same format is ings. adopted here.

The first three questions raised by Senator SMITH relate to the phrase, in article I, "at any place under its jurisdiction or control." This phrase was inserted in article I by the United States to qualify the obligation of parties "to prohibit" and "to prevent" nuclear tests in the three environments. Without this qualifying phrase, parties to the treaty would have been obligated to prohibit and prevent all nuclear explosions prescribed by the treaty, no matter where they occurred or by whom they were conducted. A party obviously could not prohibit or prevent a nuclear test explosion unless it had either jurisdiction or control over the carrying out of the explosion. For this reason, the obligation was limited to tests occurring "at any place under its jurisdiction or control." For the purposes of the test ban treaty, a

party is considered to have temporary conparty is considered to have temporary control over any place in which it conducts a nuclear test explosion during the time that the explosion is being conducted. Each control is distinguished in the treaty from jurisdiction by the use of the disjunctive "or." It was precisely to avoid the problems to which Senator SMITH calls attention that the words "or control" were inserted in article I.

Thus, the answer to Senator Smith's first question is that a party could not justify carrying out a nuclear explosion in the atmosphere above an uninhabited island not claimed by it. Although the explosion would of the party conducting the explosion it would occur at a place under the jurisdiction of the party conducting the explosion it would occur at a place under its control for the purposes of article I. Such an explosion would also violate paragraph 2 of article I which prohibits parties from "causing, enwhich prohibits parties from "causing, encouraging, or in any way participating in" the carrying out of the proscribed explosions "anywhere." This is one of a number of cases in which the obligations imposed by the two paragraphs overlap.

Similarly with respect to Senator Smith's second question, any party conducting a my

second question, any party conducting a nuclear weapon test in outer space would be considered to have temporary control over the place in outer space where the test was conducted, although it would not have jurisdiction over outer space or any portion thereof. Such a party would also have control over the area on earth from which it

directed the explosion.

The same analysis applies to Senator SMITH's third question. For the purposes of article I, and party conducting a nuclear weapon test explosion in the high seas would be considered to have temporary control over that portion of the high seas. An opinion of the legal adviser, dealing in part with the high seas, is attached.

Senator Smith's fourth question is:

"4. Does the ban on any other nuclear explosion prevent us from operating atomic energy plants for the production of electricity, the steamship Savannah, or any atomic submarine, all of which are operated

atomic submarine, all of which are operated by means of controlled atomic explosions?" The answer is "No." An explosion is the release of large quantities of energy in a very short period of time—on the order of a few millionths of a second. Nuclear power reactors such as those for producing elec-tricity or propelling steamships or submarines release energy comparatively slowly—over periods of many hours, weeks or months.

No explosions take place within the meaning

of the treaty. Chairman Seaborg told the Senate Committee on Foreign Relations:

"The treaty will, of course, not inhibit the peaceful uses in any of the fields that do not have to do with nuclear explosives; that is, the field of civilian nuclear power, and the use of nuclear energy for propulsion and auxiliary power in space and the use of iso-

topes in medicine and industry and research, and so forth" (p. 239, hearings).
Senator SMITH'S fifth question is:

5. Will we be branded as a violator of the treaty if we have an accidental explosion at one of our atomic energy plants?"

The answer is "No." The obligations of the

treaty are concerned with the intentional conduct of the parties. It could not reasonably be maintained that a party had "carried out," "caused," "encouraged," or "particiout," "caused," "encouraged," or "particl-pated in" a nuclear explosion if the explosion occurred by accident. Nor could the obliga-tion to "prevent" and "prohibit" nuclear ex-plosions be violated by an accidental explosion occurring against the will of the party and despite its best efforts to prevent

II

The analysis of the first three questions under Roman numeral I above applies in large measure to the two questions raised under Roman numeral II. As noted earlier, paragraphs 1 and 2 of article I of the treaty overlap to some extent. Paragraph 2 of article I is intended in part to prevent a party from giving assistance to another nation in carrying out the proscribed tests, and thus doing indirectly what paragraph 1 would prohibit incirectly what paragraph 1 would prohibit it from doing directly. However, by virtue of the words "causing" and "in any way participating in"—deliberately chosen because of their broad scope—paragraph 2 also outlaws direct action by the parties. To use Senator Smrri's examples, the Soviet Union would be prohibited both by the participation. would be prohibited both by paragraph 1 and by paragraph 2 from carrying out an atmospheric explosion anywhere. It would also be prohibited by paragraph 2 from "causing, encouraging, or in any way participating in" a nuclear explosion by the Communist Chinese regime in the atmosphere above Mainland China. Paragraph 2 is not limited by the phrase "under any place under its jurisdiction or control" because it does not obligate the parties "to prohibit" or "to prevent" nuclear weapon tests, as does paragraph 1.

With respect to Senator Smith's final question, an opinion of the Legal Adviser of August 12 was prepared on this point. It concludes that the United States would not be compelled to wait 3 months before resuming nuclear weapons tests if the Soviet Union violated its obligations under the treaty. A copy of that opinion is attached. The President's letter of September 11 to Senators Mansfield and Dirksen also points out that the "United States retains the right to resume atmospheric testing forthwith if the Soviet Union should conduct tests in violation of the treaty."

III

ABRAM CHAYES.

Mrs. SMITH. Mr. President, I wish to make very brief observations and comments on the answers of the Legal Adviser of the State Department.

The answers to, and observations concerning, the first three questions under the heading "I" depend for their validity upon the parties to the treaty being in agreement with the Legal Adviser's views concerning the meaning of the term "control," as used in paragraph 1 of article I of the treaty. The term "control" is not defined in the treaty and the doctrine of temporary control with respect to outer space and the high seas expressed by the Legal Adviser appears to be novel. It is reassuring to know that the Legal Adviser believes that para-graph 2 of article I of the treaty, which does not contain the term "at any place under its jurisdiction or control," would apply with respect to explosions of the

type dealt with by the first three ques-

The answers to, and observations concerning, questions 4 and 5 under the heading "I" likewise are dependent for their validity upon the parties to the treaty being in agreement with the Legal Adviser's view that the term "any other nuclear explosion" does not include either the process by which heat is obtained from fissionable material in a nuclear reactor or an accidental nuclear explosion.

As indicated before, it is reassuring to know that the Legal Adviser construes paragraph 2 of article I of the treaty to be applicable with respect to both direct and indirect acts of the parties to the treaty and is therefore not compelled to rely upon any questionable definition of the term "control," as used in paragraph 1 of article I, for the purpose of finding that explosions over unclaimed territory, in outer space, and under the high seas are barred by the treaty.

In connection with the question which was posed under this heading, it is assumed that the President's statement in his letter of September 11 to Senators Mansfield and Dirksen that the "United States retains the right to resume atmospheric testing forthwith if the Soviet Union should conduct tests in violation of the treaty" means that we are prepared under those circumstances to have others brand us as a treaty violator and that we would not feel compelled to follow the procedure adopted with respect to our denunciation of the extradition treaty with Greece—see page 4, opinion of the Legal Adviser of the State Department, dated August 12, 1963, with respect to the right of the United States to withdraw from the nuclear test ban treaty in the event of violation by another party.

Mr. CARLSON. Mr. President, for 15 years we have sought agreement with the Soviet Union on some formula that would slow down and perhaps eventually halt the nuclear arms race.

I believe the real end sought by these efforts is not solely a halt in the development of more destructive weapons-or even a gradual cutting down of those already produced. I believe our real purpose has been and should be the prevention of a devastating nuclear war from which no nation would emerge as the

We must remember that a nuclear arms race between two major world powers cannot ultimately be won by either side. Both nations must eventually face destruction or compromise. Neither the United States nor Soviet Russia believes in the promises of the other. This mutual distrust builds an endless, vicious circle and makes that first small step toward nuclear compromise a difficult but necessary one to make.

This treaty is the first concrete result of 18 years of effort by the United States to impose limits on the nuclear arms

To most people—I imagine—the reasonable aim of preventing a nuclear war should not be difficult to attain. But, Mr. President, we are negotiating with an enemy who for years has stated its primary goal was to destroy our form of democracy and replace it throughout the world with an alien Communist dictatorship. In promoting this aggressive policy, the Soviet Union has seen fit to use in its relationships with other nations every means—diplomatic and nondiplomatic—available, including deception.

Their historic pattern of secrecy at home and duplicity abroad makes it almost impossible to put trust in their signature upon any international agreement, including this most important treaty.

But, Mr. President, we should carefully note this is not a treaty of trust—it is a treaty the adherence to which may establish trust.

This treaty is self-enforcing in that it prohibits nuclear weapons tests in the three environments where our scientists tell us we can detect significant violations without onsite inspections. It carries within it neither provisions nor promises for any disarmament at all. More than that, the treaty provides that we can withdraw from it whether or not another signatory violates its provisions if we decide "extraordinary events" have "jeopardized" the security interests of our country.

In my opinion, the biggest danger is not in the terms and risks of the treaty itself, but in the obvious efforts of the Soviet Union to lull us to sleep while they prepare for another move in the cold war.

The Senate has been assured that our military readiness and vigilance will not be slowed down. Surely history has taught us to be skeptical and wary of the Communists. With history as our guide, we can turn this treaty into a victory for the free world. In the area of peaceful purpose, I feel we have much to gain or lose. To reject the test ban treaty would be a rejection in the eyes of the world of this small step away from the brink of nuclear war.

Mr. President, I consider this with-drawal provision extremely important and with regard to its implementation Secretary Rusk, in answer to my question during the hearings stated:

I think, Senator, world opinion would certainly make a difference in terms of our adopting any casual or frivolous or lighthearted approach to this question, but I have no doubt that the security interests of the United States would take highest priority here, and that these matters of passing opinion would not be a decisive factor.

Mr. President, there is another matter that I consider extremely important with which this treaty deals and that is the peaceful uses of nuclear materials the so-called plowshare program initiated by President Eisenhower.

The treaty's language is such that plowshare explosions in the atmosphere, underwater, and in outer space are prohibited as are underground plowshare explosions where resultant radioactive debris leaves the territorial limits of the country in which the explosion takes in this field but that has not yet become

Here is a firm example, Mr. President. where our negotiators were unwilling to make this treaty dependent upon trust. By eliminating all explosions, including peaceful ones, they prevented the Soviets from carrying out tests-without onsite inspection-which could be used for weapons development but hidden under the guise of peaceful uses experiments.

Because of this lack of trust, our negotiators placed language in this treaty that inhibited the Plowshare program. How much has that program been inhibited? This question bothered me and I asked Dr. Glenn Seaborg, Chairman of the Atomic Energy Commission, about it. He answered by noting that the treaty would not inhibit the peaceful uses program in the fields of nuclear power, nuclear energy for propulsion and the use of isotopes in medicine, industry, and research.

As for the field of nuclear explosions, Dr. Seaborg said that within the United States certain excavations could be undertaken along with work in the areas of mining and development of underground water resources.

Larger projects, such as canal and harbor building and mountain moving, Dr. Seaborg noted, depend upon development of nuclear explosives and associated excavation technology which were not presently available. It is my understanding that the administration foresees needing the next few years to develop our capabilities in this large scale excavation area and then plans to approach other treaty signatories on a project-by-project basis as each one becomes feasible. By then, perhaps, if the treaty has been adhered to, we may have built up enough trust between the Soviets and ourselves that they will permit us to observe their peaceful explosion experiments and we-as we have offered in the past-will invite them to observe ours.

It had been my hope that the approval of this test ban treaty would give us some assurance of a reduction in arms and armament. The Secretary of State and members of the Defense Department testified that even though the treaty is approved, we cannot expect any immediate reduction in our defense efforts. As a matter of fact, it could well increase, instead of decrease, our military expenditures for years to come.

This matter was forcibly called to the attention of the committee in the testimony of our Secretary of State, Mr. Rusk, which appears on page 29 of the hearings. On direct interrogation by the Senator from Alabama [Mr. SPARKMAN], the Secretary stated:

This treaty itself does not reduce weapons in being or prevent their further production. This treaty is aimed only at the question of nuclear explosions. I regret myself that of nuclear explosions. The street it has not been possible to make greater headway in some actual physical disarmament measures consistent with our own security.

But this treaty is not a step in that di-rection—this treaty is not itself dealing with that problem. It may turn out to be one small step that opens up some possibilities apparent.

Senator Sparkman. It is a treaty of hope so far that is concerned.

Secretary Rusk. So far as actual disarmament is concerned, it is a treaty of hope. It is a treaty of a fact insofar as explosions in those three environments are concerned.

Mr. President, the distinguished minority leader [Mr. DIRKSEN], in his impressive statement in support of this treaty last week, pointed out that our party went to the electors in 1960 with a platform that included the statement:

We advocate an early agreement by all nations to forego nuclear tests in the atmosphere, and the suspension of other tests as verification techniques permit. We support the President in any decision he may make to reevaluate the question of resumption of underground nuclear explosions testing, if the Geneva Conference fails to produce a satisfactory agreement.

This is not a partisan matter but I cannot help noting the treaty before the Senate meets almost exactly the 1960 pledge of our party, and in fact follows initiatives begun by President Eisenhower.

As a member of the Senate Foreign Relations Committee, I attended practically every hearing on the proposed nuclear test ban treaty. These hearings lasted 3 weeks and contained volumes of testimony which was given in open and executive sessions.

After hearing the testimony, I have reached the conclusion that it is in the interests of our Nation and the peace of the world to vote for the ratification of this treaty. This had to be a choice not between right and wrong, but rather a choice of the greatest gains toward world peace and the fewest risks to our national security.

Mr. GOLDWATER. Mr. President, after reviewing the remarks made in this Chamber, and the testimony regarding the proposed limited nuclear test ban treaty, I am impressed by three arguments-one in its favor, two in opposition.

In favor of it, after all is said and done. is a hope, usually described as a faint glimmer, that this may be the first step toward easing tension in the world. It is difficult, if not impossible, to argue with a hope. It is an emotional thing; and in its soft and gentle glow, arguments appear harsh. The more fragile an illusion, the more rude must seem the attempts to shatter it.

I have warned, and will continue to warn, that nuclear weapons are not the cause of tension in this world; that if all were to disappear magically overnight, the tension would remain, so long as world communism remains dedicated to aggression and obsessed by its irrational vision of man as a mere cog in the machine of history.

But hope heeds only itself. How does one remind hope that, hitherto, on-site inspection has been the qualification of our trust of any arms control scheme? How does one remind hope that the technology of remote detection still has not developed fully to a point where it can replace such inspection? Or how does one tell hope, sprung from fear, that

fallout is less a present threat than smog and fumes of everyday life? If we say these things, hope-revulsedshrinks from our harsh words. One who says these things stands alone, a sad, somber, and unwelcome guest in a house of celebrants.

We are, apparently, well past arguing th hope. The future will shatter the with hope. hope and will sober the celebrants. But

we must wait.

For my part, and the part of the other few who must heed other voices in their conscience, there is only the time now to say why we will vote, as we must, to oppose approval of this treaty. I perceive two reasons, basically; and I have based

my decisions upon one.

First, there is the reason that this treaty is a political ambush, baited by the necessity of the Soviet to ease the many pressures upon its tyranny. This has been discussed on this floor. The argument impresses me; and I share, with those who have made it, bewilderment at why freedom is aided by putting salve on the wounds of tyranny. But that is not the argument which, alone, moves me to vote as I must and as I will.

I will vote "no," because of how I read

history and perceive the future. in our history, in this nuclear age, that what peace we have had has been possible because of our strength. I see in our history the clear course of Soviet aggressions and breaches of the peace: They have poured through gaps in our strength. They have been stopped when those gaps closed or were pre-cluded when our guard remained high.

I see no change in the future until or unless the objectives of communism, not merely their weapons, change. And not even hope has spoken to us so far of a change in those objectives. Rather, all say that the objectives remain unchanged. But hope, it seems, can hear that truth and still proceed, whistling past the graveyard of experience.

Thus, if strength is the shield of peace and weakness the way to war and defeat, it is the impact upon our strength that

concerns me most.

What is that impact? Have we not heard assurance after assurance that our strength will be upheld under this treaty? We have, indeed.

But assurances are not facts, promises are not performances and I do not feel that freedom's strength, in a time of freedom's peril, can be armored by either. Such strength is a matter of here and now, not of "if and when." Real hope must be founded upon real strength.

There is a catalog that has been laid before us of the price in strength we will pay under this treaty. Have we seen a similar catalog of a Soviet price? Hope may see such a catalog; reality

does not.

The major heading of this catalog of America's price, America's strength, is that the treaty, perhaps gently but nonetheless firmly, closes the door of knowl-

Now the Senate must pardon me for speaking of real weapons in the real world. As I have said, the words sound

harsh in the glow of hope. Truth often does.

There has been work underway in our laboratories toward the design, development and test of a device with a yield of 80 to 100 megatons. Now the door will close on that, if this treaty is ratified. Does it close on similar knowledge for the Soviets? We only know that they have tested—tested, mind you, not just conjectured—devices with yields approaching that range, and we have not, and we will not under this treaty.

We have never tested fully the stamina of our hardened missile emplacements. The treaty will close the door against such tests. Will it close such a door for the Soviets? We only know that there is evidence that they have tested-have tested, not theorizedhardened structures.

Not knowing whether our missile emplacements or missile sites will withstand a severe blast, how can we be sure of our great deterrent, which is a second-strike capability? How can we even be sure that any missiles will leave their sites with the lack of knowledge that we have of the environments to which they will be subjected?

Through the eyes of hope, of course, we see tests of major weapons and systems as unnecessary. Hope says that what we have is enough, that these highyield devices are of minimum military efficiency. Lapsing only for a moment into the language of harsh fact, it is asked if several 20-megaton devices are not far better than one 60- or 100-megaton device. Again, the answer must be along the horizons of knowledge and not along the edges of the statisticians ledger sheet.

It is the knowledge of the effect, the environmental effect, of high-yield explosions, the sort we have not tested and will not test under this treaty—it is in such knowledge that we will be weakened by this treaty.

Prompt gamma pulses from high-yield explosions are known devastatingly to distort electronic circuitry.

We know very little about that subject. We know that megaton yields of which the enemy is capable could render unusable our entire communications system. It would even render unusable our entire domestic electric systems at astonishingly high distances. Since my colleagues have not been too well informed in that field, at the end of my remarks I shall ask consent to have printed in the RECORD some information that I have gathered on that subject, but I shall not offer it now.

Interference with electronic triggers is an area of grave concern. So is the effect upon missile guidance systems. So grave is the concern, that our military men must ask if the Soviets do not have the capability, with the knowledge gained in their exclusive high-yield tests, of thoroughly disrupting our retaliatory missile systems. They must ask if their systems can survive the melt-down of fissionable materials by neutron impact, the effect of X-rays, the disruption of communications and radar blackout from

beta rays, from gamma rays, from fireball effects.

Ask the men who must man the missiles and they say tests are needed. Ask if the Soviets have not already tested in this area and we find that we do not know-but there is ample evidence upon which to presume that they have.

Ask the man upon whose command rests 90 percent of the strategic striking power of this Nation: ask General Power the impact of this treaty upon the strength about which he knows as much as any man. We have all heard his answer. This treaty is not in the national interest.

Ask the man whose job it has been to work with the most advanced weapons system: ask General Schriever the impact of this treaty. We all have heard his answer. He felt he could protect his country better without the treaty.

And what of the Joint Chiefs of Staff altogether? Remember now, if you will, only that they finally supported the treaty because of many safeguards, many promises, and political advantages of which others had spoken. But remember every other day of your life, every day that the time bomb of Communist treachery ticks closer to detonation, that they spoke and spoke clearly of military disadvantages under this treaty.

Pray God that we do not have to remember that under attack, weakened and unprepared.

Remember also their warning that a state of euphoria would be the most deadly consequence of the treaty. Remember that as we now officially study increased trade with the Soviets. Remember it when the next steps are taken, the pacts proposed, the agreements signed. It is not too late to re-member those things now, but other, more popular tunes seem to dance in the

I shall not recite the page after page of cataloging of the U.S. price in strength that this treaty exacts. Senators know of them; they have heard or read them. They can restudy them. Let me just sum up the price: Under this treaty we close the door on sure knowledge of the survivability of our second-strike capability, the very capability which, until now has been the shield of peace in this world. We halt the search for the widest span of nuclear know-how at a point where the total test yields of the Soviet are a full third greater than our own.

If I had no knowledge of weapons and of the enemy, then I would wish also to vote for this treaty and share the brief illusion that it brings. But I have lived too long with reality, too long with the men who are dedicated to our defense, too long with the facts of the enemy's dedication, to discard all that I am and all that I know.

I will vote against this treaty because it will erode our military strength. I will vote against this treaty because it preserves the enemy's advances in highyield weaponry while freeing them to overtake our lead in low-yield research. We pay a price; they do not.

I do not vote against the hope of peace, but only against the illusion of it. I do not vote for war, but for the strength to prevent it.

I have been told, as have others, I am sure, that to vote against this treaty is

to commit political suicide.

I will vote against this treaty because in my heart, mind, soul and conscience, I feel it detrimental to the strength of my country.

If it means political suicide to vote for my country and against this treaty, then I commit it gladly. It is not my future that concerns me. It is my country—and what my conscience tells me is how best I may serve it.

Mr. President, I ask unanimous consent that the first 7 pages of the introduction to a paper prepared by Dr. V. W. Vodicka, technical director, Joslyn Electronic Systems Division, and John A. Kuypers, of Stanford University, may be printed in the Record following my remarks.

There being no objection, the excerpt was ordered to be printed in the RECORD, as follows:

The immediate electromagnetic effects of an atomic explosion are massive and diverse. These effects can wipe out critical weapons and communications systems in a few seconds time although the same facilities may survive in the so-called conventional part of the attack environment.

There is more to a nuclear explosion than a spectacular visual display, ground and atmospheric shock waves, heat, and atomic radiation. These are only part of the nu-

clear attack environment.

Some of the electromagnetic eff

Some of the electromagnetic effects (viz., Argus) are trans-hemispheric. All are relatively instantaneous. Some effects are more localized, with a facility damage radii of 100 to 200 miles.

Our strategic and tactical defense/offense systems are required to survive in periods of nuclear attack. Some of our facilities have been designed to withstand tremendous physical shock and radiation levels. As now implemented, these same systems (missiles, ground electronics, command/control and communications) may not dependably survive the electromagnetic nuclear environment.

Nuclear electromagnetic effects have been noted since the advent of nuclear explosion testing. Overwhelming verification of their existence and scope has been built up by correlation of shot times (most accurately defined in foreign technical papers) with concurrent working system outages and damages. This correlation effort by the authors began in 1952 with notations of electromagnetic effects in the vicinity (200 mile radius) of the test grounds.

In August 1958 the Argus test series in the South Atlantic Ocean caused dramatic and unpredicted transhemispheric electromagnetic disturbances. A low-yield shot at 200 miles altitude caused the undersea co-axial cable across the North Atlantic Ocean to intermittently fail in function. Correlated outages existed in critical defense systems at this time but were not published due to classification of facilities logs.

Soviet instrumentation of our test efforts defined our shot times to the second. The times were published in unclassified technical papers.

The effects of the Argus test series on commercial and military communications gave additional verification of the existence of highly significant nuclear electromagnetic effects. A preliminary paper on the subject was prepared in 1960 and distributed by the authors to those who should have been concerned. Since that time, much additional material has been undovered. More effects have been defined and a good amount of quantitative data observed and derived. Foreign unclassified data continues to be a major source of information. Our systems design and implementation remains in the horse and buggy stage with respect to nuclear electromagnetic effects.

Many tactical and strategic weapons, communications, and command systems are not hard electrically. These systems as now implemented may not survive electronically to the same degree that they will survive mechanically. Catastrophic electrical and electronic failures can be expected in most military facilities which are combined with commercial facilities as now installed to a radius from ground zero as follows if not properly protected:

1 MT fusion, low altitude 20
10 MT fusion, low altitude 72
50 MT fusion, low altitude 120

The catastrophic failures are defined as: Vaporization and explosion of electrical conductors (power distribution and communications), equipment component burn out (especially solid state devices) and massive insulation failures due to both conductor overheating and electrical stress (over volt-

age) and ionization of dielectric.

Lesser systems fallures can be expected outside of the radii specified above. Both calculations and actual experience show that our systems are vulnerable to a lower order of damage in this extended area. These troubles are on the order of: component failure, blown fuses, damaged or blown circuit breakers, grounded protectors, computer confusion caused by unexpected ground loops, translent pulses, and unprogramed events and instructions, disturbance of data transmission facilities. Disruption of radio frequency transmission paths has been partially recognized but unduly minimized.

Systems troubles are created daily by natural and mammade electromagnetic phenomena. The natural effects include lightning and lesser random static discharges, aurora, magnetic storms, telluric (earth) current pattern changes. The mammade effects include power systems switching transients, and electrical interferences caused by arc welding, electric shoe arcing, and electrical power faults which at times cause radical local ground potential changes.

The electromagnetic effects associated with fusion activity have been partially sorted out. The list includes:

- 1. Argus effect: This aurora-like mechanism has been noted in every high attitude test (United States and Soviet) since August 1, 1958. This effect can create a manmade aurora at any desired location equal in electrical disturbance to any recorded sun-spot storm.
- 2. Electromagnetic pulse effect: This effect has demonstrated its power in every nuclear test shot.

Early low-yield fission test activity caused concurrent outages on powerlines passing the general area. Circuit breakers on main feed lines opened due to over voltage conditions induced at distances in excess of 80 miles. This extremely powerful effect has been observed from the beginning of nuclear test activities. It contributed to most of the instrumentation fallures experienced in early test efforts. This effect continues to cause instrumentation trouble because it is neither recognized nor understood by many instrumentation systems design engineers. The effect causes potential changes on conductors in excess of 10,000 volts with rise times in the order of 20 to 100 nanoseconds and durations of 1 second or more. This affects buried cable in the vicinity equally with any aerial facilities that may be left

standing. Insulation breakdown from voltages several orders in excess of design stress are followed by extremely high currents. The result is conductor burnout in the immediate vicinity and high voltages passed down the line to the distant terminal or other electrical/electronic facility.

- 3. Neutron flux effect: This effect is often masked by effect No. 2, since it takes place relatively close to the nuclear activity. The end result of this mechanism is the development of abnormal voltages in electrical conductors accompanied by insulation breakdown due to heat, chemical change, and electrical stress plus initiation of secondary radiation along the flux path.
- 4. Static discharge effect: This is similar in appearance and occurrence to lightning. It is applicable to radio antennas and other above-ground facilities which may have survived the mechanical stresses outside of but close to a nuclear fireball. These facilities invite massive electrical discharges from the fireball edge much as a lightning rod. The currents that would be experienced are sufficient to melt the structural components and collapse the facility.
- 5. Radio frequency transmission effects: This area has been covered qualitatively in papers and reports by others but more quantitative data correlation work is required. This is especially true in the low frequency and ultra low frequency transmission area. Categorical statements minimizing or pointing out the absence of vulnerability of these transmission media are unrealistic. Large outages in low frequency and ultra low frequency transmission systems have been experienced in connection with nuclear testing activity and are to be reckoned with when examining systems' reliability in the nuclear environment. (See appendix A.)

The vulnerability of existing facilities (and future systems) can be reduced without resort to exotic methods. Knowledgeable application of systems design and installation fundamentals and attention to detail in interface areas is a must. Systems designers and operations personnel must be apprised of the electromagnetic effects mechansims and quantative results of same. Existing knowledge must be used and all known techniques brought to bear on this problem. The use of fast response, selfhealing circuit protection devices will materially reduce the aforementioned damage radii. Certainly, R. & D. design of new transmission systems should proceed. Unique though not necessarily overspohisticated new systems have been proposed which are far more immune to the electromagnetic environment than the transmission techniques now used.

There is a definite need for a focal point for information regarding the various electromagentic effects on weapons, command, and communications systems. The sources of information are diverse and not always in themselves knowledgeable as to the "practical results in working systems" aspect. The large range of sources can be realized by a perusal of the bibliography. Some of the most significant data available is from unclassified technical journals from the U.S.S.R., France, and England. Another group of sources are private industry with no government ties, and government agencies who are systems operators out of the realm of the defense effort. Definitive studies and practical analysis of electromagnetic effects versus defense systems have been urgently required since before nuclear weapons became available for use by others than the United States. As of this time there is not so much as a handbook which can be used by systems designers as an information source. The present Mil-Spec series is completely inadequate to meet the total reliability requiremnts of communications and weapons systems facilities. At present the

Mil-Spec series does not recognize the real integrated EMP problem.

Where some of the effects are recognized

but systems solutions not readily apparent, the problem is classified and withheld from personnel who must have the information in order to design systems that will accom-modate the problem.

Mr. THURMOND. Mr. President, will the distinguished Senator from Arizona yield?

Mr. GOLDWATER. I yield. Mr. THURMOND. I commend the able Senator from Arizona for his magnificent statement. The distinguished Senator from Arizona is a major general in the Air Force Reserve. In performing his duties in that capacity he has had occasion to learn a great deal about missiles, rockets, bombers, and nuclear weapons. His statement today on this subject should bear great weight with the Senate. He has made a fine con-tribution, which I am sure will be helpful to the Senate.

Mr. GOLDWATER. I thank my distinguished friend from South Carolina, whose military knowledge I respect

highly.

I implore my colleagues in the Senate to read the excerpt from the paper I have asked to have printed in the RECORD, when the Record becomes available tomorrow. It covers a subject we have not discussed, which is of vital interest to our survival.

As these scientists conclude, catastrophic electrical and electronic failures can be expected in most military facilities which are combined with commer-

cial facilities.

We are not talking about a direct hit. We are talking about the electromagnetic impacts, which some scientists say can travel 1,100 miles and which some scientists agree can have an effect of 1 megaton of fusion in a low altitude burst at 20 miles. In fact, as a result of a lowyield shot at 200 miles altitude the undersea coaxial cable across the North Atlantic Ocean was caused to intermittently fail to function.

We know enough about effects to know that all modern circuitry-all circuits in radios, all circuits in radars, all circuits in inertial guidance systems, as well as the electronic triggers which cause the missiles to travel—is now in the process. of being redesigned, because we do not know enough about the effects of the electromagnetic pulse to defend and pro-

tect the systems we now have

This one item alone should cause the Senate to pause before approving this treaty, at least until a time is reached when we have an opportunity to find out how to protect our own systems.
Mr. THURMOND. Mr. President, will

the Senator yield further?

Mr. GOLDWATER. I yield.

Mr. THURMOND. Is it not true that he only way we would be able to acquire the knowledge about which the Senator has spoken is by testing in the atmosphere? It is impossible to acquire that knowledge by testing underground, is it

Mr. GOLDWATER. We could acquire much of the knowledge by testing under-We could study the effects of ground. gamma rays underground.

Mr. THURMOND. We could acquire a portion of the knowledge from underground testing.

Mr. GOLDWATER. Yes. I have yet to meet a scientist who will categorically say we can acquire the information needed in this way. It cannot be said to the people of the United States, "We have a device which we guarantee will work in the atmosphere—through a nuclear environment, through gamma rays, through fireball blackout," unless it is tested in the atmosphere.

We can develop the theory. We can do a great deal of experimentation. We can do much extrapolation from underground testing. But no man can guarantee that any weapon will work without testing it in the environment in which it must be used.

Mr. THURMOND. The weapon must be tested in the environment in which it is to be used in order to determine actu-

ally what results will be obtained.

Mr. GOLDWATER. Yes.

Mr. THURMOND. Under the treaty, if ratified, that would be impossible.

Mr. GOLDWATER. The Senator is absolutely correct. I recall that shortly after our entry into World War II we tried a torpedo which the scientists told us would end all naval warfare. We had never tested it. It did not work. We spent a long time getting the old torpedoes ready to go.

I wish it were possible for me to vote for the treaty. I should like to vote for it. Knowing the scientific and military facts of life, I think we are asking for real trouble if we ratify the treaty.

Mr. THURMOND. I know the great respect the able Senator from Arizona has for General Power. I should like to read a statement General Power made a few days ago:

In my personal opinion all sensible people in this world desire peace and freedom from a nuclear war. But there are two different theories of how to get there.

One theory is through military superiority and through deterrence, which is the philosophy of the strategy we have used. another one through disarmament,

I personally think the two theories are diametrically opposed. I don't see how you can arm and disarm at the same time. I have studied previous disarmament measures and in my opinion disarmament is a proven concept to get you into a war. I think history will prove that the surest way to cause a war, nuclear war or an war, is to

I wonder if the Senator from Arizona is in accord with that statement by General Power.

Mr. GOLDWATER. History would make me be in accord with it, even if I were not inclined to be. The general is absolutely correct in that statement.

Mr. MONRONEY. Mr. President, the choice we face here is not easily defined or described, but many Senators have participated in this discussion, and in going over the record I was deeply impressed with the depth of the study which the Senate has made of this treaty. It is now quite clear that the Senate will ratify this treaty by a substantial margin above the required two-thirds majority. One cannot review the many thousands of words that have been said in the Senate concerning the treaty without concluding that the decision to support it is sound.

In the simplest terms, what we face is a choice of risks. Or, to put the matter in positive terms, a choice of hopes. cannot be sure of the benefits which this treaty offers mankind. On the other hand, we cannot be certain of the safety and security of mankind without it. With the treaty, we hope that the re-lentless increase in poisonous radioactivity in the atmosphere will be halted. With the treaty, we hope that the rush of nations to arm themselves with nuclear weapons which threaten annihilation of civilization will be halted, or at least slowed. With the treaty, we hope the world can move into an era of mutual trust and confidence based on performance. Not until we see how the Soviet Union performs under this treaty will such trust and confidence in it be merited, but we can well afford the risk of a probationary period, in my opinion.

To refuse to ratify the treaty will mean an end to the long-drawn-out negotiations which we initiated in 1946 and have pressed in various conferences ever since.

Now that we have reached an agreement at long last, limited as it is, we can be sure that, if we refuse to go through with the initialed treaty, we face a prolonged period of unlimited testing, without hope of another open outer door for limiting the dangerous effects that will result.

If the limited test ban is violated, we will only face the condition we face today and for years to come without any treaty. Nations would again resume contaminating our soil and polluting the world's atmosphere and space.

This decision can and perhaps will play a vital part in changing the course of the cold war. On it certainly ride the hopes and fears of millions of the world's people, who pray for some cessation of tensions that build up in the present nuclear arms race.

There are both certainty and uncertainty about the ratification of this treaty. No treaty is foolproof or has built-in guarantees of success.

There is certainty, however, among the neutral and uncommitted nations, numbering more than a billion of the world's peoples, that this crossing of the outer threshold with a limited treaty is in their best interests. These are the innocent bystanders who know that they would suffer along with the industrial powers should a nuclear exchange take place.

They see in this pause in the acceleration toward greater and more terrible weapons a chance for a cooling off period that may—repeat may—lead to other agreements resulting in further easing of tensions among the atomic powers.

There is certainty also among the smaller but more industrialized nations, many of them our allies, who have not yet entered the field of atomic armament but who feel that they must soon make a fateful decision. This decision will tax their industrial and scientific capabilities and thrust them into the maelstrom of atomic weapons development. If they enter, they will be a part of the acceleration toward more terrifying weapons.

This proliferation of atomic power to many smaller nations, the neutral, the friendly and those who lust for power over their neighbors, raises an international danger. A worldwide atomic war could be triggered when the grave responsibility of possessing atomic weapons rests with the irresponsible. War by miscalculation or by blackmail multiplies the threat we face. If great danger lies in having these weapons in the hands of three atomic powers, it will be magnified many times when new nations acquire even a modest stockpile of weapons.

I believe it is evident that the nations who have already signed the pact are certain that it is in the best interest of their security. It will allow them the privilege of abstaining from the arms race, and being spared the great expense and attendant dangers of entering into the atomic club.

They feel, I am sure, that the hope for negotiations is better if the possessors of such weapons are few in number, and if even these are seeking to limit the dangers inherent in the arms race.

We cannot avoid the knowledge that more than 90 nations already have subscribed to the treaty. We cannot avoid being aware that all these other nations acted with knowledge that this treaty is useless without the approval of at least 67 Members of the U.S. Senate.

The overwhelming support which the treaty has engendered around the world was clearly evident to Members of the Senate and House of Representatives who attended the 52d Conference of the Interparliamentary Union starting last week in Belgrade. Previously, the Senate's attention has been directed to news dispatches sent to this country from Belgrade emphasizing the treaty's transcendental importance in the minds of the 500 elected lawmakers, representing nearly 70 national governments, in attendance there. The U.S. delegates heard speaker after speaker praise the treaty. At every hand, day and night, we were told that the treaty offers new hope for enduring peace.

One U.S. journalist cabled to his readers:

It is evident to every Senator and Congressman attending this global gathering of parliamentarians that if the U.S. Senate turns its back on the test ban, world opinion will turn its back on the United States in agony and disappointment.

I heartly agree with this journalist's appraisal of the common viewpoint held by the delegates at Belgrade. Peace remains the great unifying motive of all mankind, and leaders of more than 90 nations have already recognized this freaty as a step in the direction of peace, or as a step backward and away from the horrible possibility of a nuclear war.

I am very much aware, however, that Members of the Senate must not let this worldwide display of fervor for the treaty to be the controlling factor in their deliberations. Instead, we must keep in mind that this phenomenal enthusiasm is the direct result of the leadership which the United States has provided along the path of peace. We must remember that this treaty was our idea in the first place, and that we are now en-

gaged in testing the courage of our own convictions. The record of American efforts to secure a workable limitation on the testing of nuclear weapons dates back to 1946, the year after weapons of this dimension were employed by this country to conclude a war that this Nation had been forced to fight. The report of the Committee on Foreign Relations recites the details of these efforts, year by year, through the administrations of President Truman and President Eisenhower.

This has never been a partisan issue with the American people. In 1960, both President Kennedy and his Republican opponent for the Presidency, the then Vice President, Mr. Nixon, repeatedly expressed their hopes that the negotiations with our allies and with the Soviet Union, started in 1958 at the urging of President Eisenhower, would prove fruitful.

The bipartisan support which this treaty has won speaks well for the guarantees which it embodies.

The limited test ban treaty, however, is challenged by its opponents, who assert that it casts a grave doubt on our continued and continuing superiority in atomic weapons. We have been advised, and I believe properly so, that today we are the world's strongest atomic power, both in technology and in the quantity of our weapons.

Doubt has been raised, however, that this limited ban will cause us to lose our advantage. From all the evidence I have read, the treaty offers us an opportunity in which the dangers are minimized. The values of such a ban, so eagerly desired by the world, offset the uncertainties which are bound to exist ir any such agreement.

As the Preparedness Investigating Subcommittee has declared in its concluding paragraph:

The question is one of weighing relative

The fear derives from exposure on four principal points. These points are: First. The significance of the 60- to 100-megaton bomb exploded by the Soviets.

Second. The question of the superiority of smaller nuclear weapons.

Third. The development of the antimissile missile.

Fourth. The survivability of our deterrent force.

The record is filled with testimony on both sides of these questions. However, with the strong testimony from the Joint Chiefs of Staff, numerous scientists, our own leaders on the Joint Atomic Energy Committee, and our own distinguished Senate chairmen, Senator Pastore and Senator Anderson, who are experts in this field, I feel that the advantages of the limited test ban treaty outweigh the fears expressed on these four points by opponents of the treaty.

On the question raised about Russian superiority because of testing of the 60-megaton bomb, I believe the judgment of our military and civilian leaders is convincing. We were free to explode all the giant bombs we chose during this recent period of uncontrolled testing. We made a decision, based on our knowl-

edge and strategy, that such weapons were not necessary. We based this decision on the fact that our present arsenal contains more effective bombs for selected targets, rather than terror bombs of widespread range.

I am further assured by the testimony that the present state of our art would be sufficient to quickly produce such giant bombs without additional atmospheric testing, if such weapons were later needed.

On the second point, the versatility and quantity of our smaller nuclear weapons, with existing instruments of delivery for strategic bombing, give us great security. True, these weapons have lower yields, but they still have the power to wipe out any known military or industrial targets contained in our strategic plans. The versatility and selectivity of all types of weapons in our arsenal make us the world's strongest atomic power. Our superiority in this field of quantity and types more than offsets any of the giant bombs the Soviets may produce.

Further, the provision permitting all kinds of underground testing enables us to continue, as has been promised by innumerable witnesses, to upgrade and update our weapons capability to any extent necessary.

On the third point, the development of the antiballistic missile, several challenges have been made. The testimony is conclusive that the Joint Chiefs and atomic experts believe that the problem here lies in the field of delivery, guidance, and selectivity of targets, rather than in the field of explosives. Underground testing of explosives is still possible and the testing of the intercepting missile itself is one that is permitted since it would not require atmospheric blasts.

Whatever protection against blackout or other exotic effects is needed, this must at all events be built into the missile and not into the explosive it is designed to carry.

On the fourth and last point, the vulnerability of our hardened missile sites has been discussed. Here again our experts are strong in their opinion that the Russians have gained no more knowledge in this field than we already possess. The large yield tests conducted by the Russians were not effects tests upon such sites, and there is no evidence that they gained this type of data from their recent explosions.

Thus the evidence I believe we have from our own leaders, who have spent years in specializing in this field, would indicate that both sides will be equally restricted by the treaty and that neither would gain a substantial advantage over the other.

One danger that gould exist has been dispelled by assurances from the President and from agencies in charge of our development program that we will expand and improve our capabilities to detect atmospheric and underwater explosions to even a greater degree than we now possess.

The chance of cheating by illegal explosions will be even further reduced by continued improvement in our vast detection facilities.

Also reassuring is the guarantee that our laboratory facilities will be held in a state of readiness so that if the treaty is breached, we can immediately resume atmospheric testing on the finding by others. This ever-ready mobilization for further atmospheric testing not only guarantees our readiness but also keeps together the experts who have been so successful in weapons development in the past. It will also discourage those who might be inclined to cheat.

This team could be used promptly should it be deemed essential for our national security, or should the treaty or any of its terms be abrogated by the

Soviets.

These were the requirements demand-

ed by the Chiefs of Staff.

Their assurances were spelled out in detail by our military leaders in testimony before the Subcommittee on Defense Appropriations when on August 20, 1963, the Deputy Secretary of Defense, Mr. Gilpatric, summarized in these words:

We do have in this year's budget funds that would support the kind of an underground test program, the kind of nuclear effects test research program that would meet the conditions that the Joint Chiefs put upon their approval of the partial test ban,

Those opposed to ratification of the treaty have charged that it will commit the United States to a process of disarmament without preserving the principle of inspection, which has been the cornerstone of U.S. disarmament policy. As a number of Senators have pointed out, this is a false and misleading premise.

Dr. Harold Brown, director of Defense Research and Engineering, told the Foreign Relations Committee:

It does not limit arms development. It does not reduce armaments but it does reduce arms development. I believe that unless we get some kind of arms limitation as well as maintaining our own military capability the next 10 years are going to see further degradation in everyone's security as other nations obtain nuclear weapons, less responsible ones than have them now, I think that will make everyone less security

I don't say this treaty is going to solve that or produce the millenium but I think in the absence of this treaty, which has represented the first step, no one can go on to anything else.

We have been reminded continually during the course of this most worth-while debate that the U.S. Senate must take into account, not only the hopes and aspirations of the American people, but public opinion throughout the world as it considers this limited nuclear test ban treaty. We will, of course, give first consideration to the security and welfare of the United States.

As a signatory to this treaty, we have no absolute guarantee that the United States can maintain its present security. We have the solemn word of the Secretary of Defense and the Chairman of the Joint Chiefs of Staff that the treaty offers the United States clear and indis-

putable advantages.

General Taylor said:

The Joint Chiefs of Staff have reached the determination that while there are military

disadvantages to the treaty, they are not so serious as to render it unacceptable * * * ti is the judgment of the Joint Chiefs of Staff that, if adequate safeguards are established, the risks inherent in this treaty can be accepted in order to seek the important gains which may be achieved through a stabilization of international relations and a move toward a peaceful environment in which to seek resolution of our differences.

In the same vein, the Secretary of Defense, Mr. McNamara, declared:

The risks under the treaty are either small or under control, and the values of the treaty are substantial even if we consider only the military area. The scales are clearly tipped in favor of the treaty, Mr. Chairman. It has my unequivocal support.

The risk, well recognized though not clearly defined, that this treaty promises to reduce is the hazard that mankind will suffer for generations to come if atmospheric testing is not stopped. This is the risk that is recognized. This risk we assumed in the interest of national security when the development of weapons required it. It is a risk which can now be reduced.

Most of the people who have written to ask me to vote for ratification have been concerned primarily with the danger of radioactive fallout from continued atmospheric testing. A letter from a 26-year-old resident of Norman, Okla., is fairly typical. She said:

I am 26 years old, the mother of two small children. This is my first letter to a legislator. I was nudged into action by a recent news story which quoted the Public Health Service as saying the amount of radioactive strontium 90 in the Nation's milk this May was almost twice that of a year ago. I want to make it absolutely clear that I am totally in favor of the pending test ban treaty, and of any further steps taken to reduce the threat of nuclear war or of radioactive polsoning from the current arms race.

This writer went on to express her concern that the Federal Radiation Council has not established firm standards regarding the hazards of radioactive exposure to human health. I share her feelings, and I urge my colleagues who are members of the Joint Committee on Atomic Energy to keep pressure applied to this problem. In June of this year, I noted, the Subcommittee on Research, Development, and Radiation of this Committee held extensive hearings on this subject. At the conclusion, the council promised to provide such guidelines.

This subcommittee was told that after tests were started by the Soviet Union in 1961, the fallout rate rose sharply. By the end of 1962, more fission products were put into the atmosphere than in all preceding years of testing—and the Soviets were largely to blame.

The contamination of space and of the atmosphere by past tests has been a danger to all forms of life on this planet. Carried by rain and by air currents, no one is exempt from its dangerous effects. For peculiar reasons, the deposits collect irregularly in certain areas. But sooner or later, the fallout that is shot into space or air will reach the earth. What is the point at which, in our efforts to be secure, we contaminate the very elements which sustain life?

Of this we can be sure: Unlimited atmospheric and space explosions of big-

ger and bigger yield bombs will bring us closer to the time when the testing can be dangerous to life and can contaminate the food supplies of wide areas of the world. The prevention of such contamination, through limiting atmospheric and space testing, is vital to our very existence.

The common sense and common hopes of the American people have been asserted once more in unmistakable terms. Since the founding of our Nation, we have sought peace and understanding among men. It has been a risky road, but is one we willingly take. It can lead all humanity to a better world.

EFFECTS ON NUCLEAR WEAPONS
AND COMMUNICATIONS OF CERTAIN PHENOMENA INDUCED BY
NUCLEAR BLASTS

Mr. SPARKMAN. Mr. President, an article appearing in the September 16, 1963, issue of Missiles and Rockets, carrying the title "Soviets May Have Ultimate ABM," contains a number of substantial inaccuracies in the form of errors of fact and misleading statements, which should be corrected.

At the outset, the Missiles and Rockets article notes concern over the possibility that the electromagnetic pulse created by exploding very-high-yield nuclear weapons could deactivate U.S. missiles in their silos. It is stated that this concern is behind the opposition by many high military officers and nuclear scientists to the nuclear test ban treaty. The article fails to state that the overwhelming majority of both the military leaders and leaders in the field of nuclear science have registered support for the treaty. These include the Secretary of Defense, his Director of Defense Research and Engineering, the Joint Chiefs of Staff, and the Chairman of the Atomic Energy Commission. These are the men who are primarily responsible for the military security of the United States, and also the ones who have access to all available information upon which to reach a judgment concerning the existence or nonexistence of certain vulnerabilities in our retaliatory nuclear

Possible uncertainties concerning the effects of electromagnetic pulse on U.S. missile systems, as well as other uncertainties, were in the mind of Secretary of Defense McNamara when he addressed the problem of missile-site survivability, in testifying before the Senate Foreign Relations Committee on August 13, 1963. The Secretary of Defense stated:

Our missile force is deployed so as to assure that under any conceivable Soviet first strike, a substantial portion of it would remain in firing condition. Most of the landbased portion of the force has been hardened, as well as dispersed. Minuteman silos are designed to withstand thermal and pressure effects and ground motion effects of typical Soviet weapons detonated at relatively close quarters.

The Minuteman control posts are protected by extreme hardening. In addition, we have duplicative facilities which will in the future include the capability of launching each individual Minuteman by a signal from airborne control posts.

Uncertainties * * * will continue to be compensated for by conservative designs, wide dispersal and large quantities of missiles.

Dr. Harold Brown, in testimony before the same committee on August 21, 1963, added the following:

In the future we expect we will be able to fire advanced U.S. missile systems on the basis of a signal sent out from an aircraft without requiring survival of the launch control centers, which presently send the signal to launch the missile, and without requiring survival of their cable connections to the missile site.

This will eliminate any effect of vulnerability of launch control centers or of control cabling.

Therefore, those who are best qualified to judge have concluded that any uncertainties regarding EMP-electromagnetic pulse-do not constitute an unacceptable risk to the Nation's security in entering into the nuclear test ban treaty.

The Missiles and Rockets article has indicated that the "ultimate" ABM may be one which de-activates missiles in their silos. The statement is made that:

Achievement by the Soviets of the capability of using their first strike offensive weapons simultaneously as defensive weapons that would destroy the electronics of U.S. silo-based missiles would wipe out the ability of the United States to retaliate.

This statement is imprecise and inaccurate in several important respects.

First, the U.S. retaliatory capability is derived from large numbers of weapons of various yields, capable of being delivered on target by a variety of means—the "weapons mix." Our strategic retaliatory forces consist today of land-based missiles, such as Minuteman, Titan, and Atlas; sea-based missiles, such as the submarine-launched Polaris; and long-range aircraft, primarily B-52's. The sea-based and aircraft-deliverable weapons which today constitute the great bulk of the U.S. retaliatory forse would be unaffected by any possible EMP vulnerability pertaining to the land-based missiles.

Second, with regard to the ability of our land-based missiles, and, in particular, our hardened Minuteman systems. to survive a Soviet surprise attack, Secretary McNamara has stated:

We know, and the Soviets know, that in the event of a surprise Soviet first strike, at least a substantial proportion of our Minuteman missiles will survive.

On the question of a possible EMP vulnerability of our land-based missiles, the Missiles and Rockets article cites Gen. Thomas S. Powers, commander of the Strategie Wir Command, as having expressed "fear * * in depth." General Power is an outspoken critic of the nuclear test ban. However, during the course of hearings before the Preparedness Investigating Subcommittee, headed by the Senator from Mississippi [Mr. STENNIS, General Power was asked the

Concerning the Minuteman system, do you have confidence in the ability of this system to perform its assigned mission?

General Power replied:

Cieneral Power, whose testimony before the Stennis subcommittee is frequently referred to in the Missiles and Rockets article, may disagree with the Secretary of Defense on the degree of uncertainty that is acceptable to him; but there seems to be no apparent disagreement with respect to the conclusion that our Minuteman system is one upon which the United States can justifiably rely.

It would also be well to clear up some of the confusion created by the Missiles and Rockets article in categorizing as an antiballistic missile a possible Soviet weapon designed to knockout U.S. missile silos. The popular concep-tion of an ABM is one which is designed to intercept and destroy incoming missiles. A weapons system with the assigned mission of destroying enemy missiles prior to being launched is generally referred to as a counterforce weapon. However, the Missiles and Rockets article has, unfortunately, lumped the two different concepts together in such a way as to misinform the reader.

For example, the article contains the statement:

The Soviet lead in antiballistic missile development has been acknowledged even by administration supporters in the test ban debates. It is based on the long range ability of strong electromagnetic pulses to crip-ple the electronics system of a missile so that it cannot be fired.

The view as to the relative capabilities of the United States and the U.S.S.R. in the ABM field, as considered by the administration officials in the test ban debates, was based on the generally accepted notion of a defense against incoming warheads that had already been launched. The question of electromagnetic pulse raised in the article is irrelevant to this generally held conception of an ABM system. Concerning the substance of whether the United States or the Soviet Union is ahead in the development of an ABM system, Secretary McNamara has stated:

The best present judgment is that our design efforts are comparable in magnitude and success with those of the Soviets. Any deployed system which the Soviets are likely to have in the near future will probably not be as effective, almost certainly not more effective, than the Nike-Zeus system. should be noted that the United States decided not to deploy the Nike-Zeus because its effectiveness was inadequate.

Dr. Brown has expressed his view of the relative capabilities of the two sides, as follows:

I think we are roughly comparable (the United States and U.S.S.R.). If I were forced to say one side or the other is ahead on knowledge, I would say that we were, but I don't think that is a very firm statement

A better judgment, I think, is that we are about equal.

In the Missiles and Rockets article, we also find, in reference to the Preparedness Subcommittee report, the following:

It noted that the character of the recent Soviet high-yield tests indicated they were centered upon antiballistic missile develop-

This statement, like the statement Yes, I do. I have a high confidence factor. previously discussed, is misleading in

implying a connection with electromagnetic phenomena, and is similarly irrelevant. Moreover, it confuses Soviet high-yield tests with high-altitude experiments. The Stennis subcommittee report referred to a series of high-altitude operations which, if properly instrumented, could have provided substantial and important data on various types of radar blackout and nuclear effects relevant to the solution of various problems in connection with ABM development. As to relative knowledge in the field of these nuclear effects, Dr. Brown has stated:

With respect to high altitude tests carried out for the purpose of determining the effects of nuclear bursts on communications blackout, radar blackout, and nuclear weapons vulnerability, Soviet and United States experience appear to be comparable.

Each side has had about the same number of tests, over yield ranges and altitude ranges which are comparable though not identical, the number of nuclear tests carried out by related missile tests appears to be about the same although different techniques for making the measurements were used by the two countries.

Finally, the thrust of the Missiles and Rockets article is contained in the statement that:

EMP, however, might be capable of incapacitating a great number of missiles at

Secretary McNamara, in reference to missile site vulnerability, stated-

The most pessimistic view * * * suggests a vulnerability ratio for our hardened, dispersed Minuteman sites of less than two sites killed on the average by a single verylarge yield Soviet missile.

The numbers of missiles on each side are such that a 2-for-1 kill ratio would leave the United States with the capability to destroy the Soviet Union, after absorbing a Soviet first strike.

RAPLY TO KENNEDY TAX SPEECH

Mr. MILLER. Mr. President, last evening, the President of the United States went before the American people on television and radio to seek, as is his prerogative, to build up public opinion in support of his position that his tax cut bill is in the national interest.

We trust that equal prime time will be given by the television and radio stations to enable the other side of the argument to be heard by the American people. And in order that public opinion will have a fair chance to be fairly developed, we trust that the other media of the press will see to it that equal coverage in an equally prominent place is given to the opposite viewpoint. For example, I note that front page coverage was given by several newspapers to the President's sneech. It would be only President's speech. It would be only only fair to have an equal amount of front page coverage given by these newspapers to those of us who wish to rebut the President's argument. This is par-ticularly so, in light of the President's own evaluation of the tax cut bill, when

No more important legislation will come before the Congress this year.

Let everyone understand that all of us agree with the President that the



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Senate

The Senate met in executive session at 10 o'clock a.m., and was called to order by the President pro tempore. Hon. KENNETH B. KEATING, a Sen-

ator from the State of New York, offered the following prayer:

Our Heavenly Father, we commend ourselves to Thee. Will Thou guide our minds, our hearts, and our lips in everything we do, that we may better serve our country and, above all, serve Thee. Wilt Thou be with all the Members of

the Senate and their families, particu-

larly with those who may now be impaired in health or sufering in some manner unknown to their colleagues.

We thank Thee for the help Thou hast given in the past to our Nation and to those of us who endeavor to serve our Nation in the Halls of Congress.

We ask it in Thy name on this day

We ask it in Thy name on this day

of dedication. Amen.

Mr. MANSFIELD. Mr. President, I wish to take this means to express to the distinguished Senator from New York [Mr. Keating] my deep appreciation for the prayer he has just offered. It was most moving and touching, and I think it was in the best possible taste. I believe the Senate is indebted to this distinguished Member of the Senate for the prayer he offered in the Senate Chamber this morning.

COMMENTS ON SENATORS' DECI-SIONS ON THE NUCLEAR TEST BAN TREATY

Mr. MANSFIELD. Mr. President, I have been disturbed by a trend during the course of the debate on the question of Senate approval of the nuclear test ban treaty, as reflected by a tendency on the part of columnists, commentators, cartoonists, and organizations, to question the integrity and motives of Senators in connection with their decisions to vote either for or against Senate approval of the treaty.

In my opinion the treaty has caused a great deal of soul searching by the great majority of Senators. I do not question the motive of any Senator in connection with his consideration of the treaty, because I know each Senator has given the matter deep and thoughtful consideration; and I am sure each Senator is

aware of the terrible responsibility which is his as an elected official.

No Senator has been irresponsible. No Senator has sought to delay the Senate's consideration of the treaty. No Senator has advocated anything except what he thought would be in the best interests of the United States.

Therefore, Mr. President, I hope that when this issue is decided, no columnist, commentator, cartoonist, or organization will impugn the patriotism or good faith of any Senator, but that, instead, all will realize that the Senate, in its collective wisdom, will have done its best in facing this knotty and difficult question.

Insofar as patriotism, integrity, and responsibility are concerned, these labels should be applied equally to all Senators—both to Senators who vote in favor of Senate approval of the treaty and to Senators who vote against it.

ORDER FOR ADJOURNMENT TO TOMORROW AT 10 A.M.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that when the Senate concludes its business today, it adjourn until 10 o'clock tomorrow morn-

The PRESIDENT pro tempore. Without objection, it is so ordered.

NOMINATION

, Mr. MANSFIELD, Mr. President, I ask that the Senate now proceed to con-Mr. President, I sider the nomination on the Executive Calendar.

COMMODITY CREDIT CORPORATION

The legislative clerk read the nomination of George L. Mehren, of California, to be a member of the Board of Directors of the Commodity Credit Corporation.

The PRESIDENT pro tempore. With-

out objection, the nomination is con-

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the President be immediately notified of the confirmation of this nomination.

The PRESIDENT pro tempore. With-

out objection, the President will be notified forthwith.

Mr. MANSFIELD. Mr. President, for the information of the Senate, let me state that, in the opinion of the leader-ship, the action just taken does not con-stitute a break with our statement that no other business would intervene before final action on the treaty was taken. The nomination has the unanimous approval of the committee, and meets with the approval of the leadership.

TRANSACTION OF ROUTINE LEGIS-LATIVE BUSINESS

Mr. MANSFIELD. Mr. President, I ask unanimous consent that, as in legislative session, there be a morning hour, and that statements in that connection be limited to 3 minutes.

The PRESIDENT pro tempore. Without objection, it is so ordered.

THE JOURNAL

On request of Mr. Mansfield, and by unanimous consent, the reading of the Journal of the proceedings of Wednesday, September 18, 1963, was dispensed

COMMITTEE MEETING DURING SENATE SESSION

On request of Mr. Mansfield, and by unanimous consert, the Subcommittee on Housing, of the Committee on Banking and Currency, was authorized to meet during the session of the Senate

PERSONAL STATEMENT BY SENATOR ROBERTSON

Mr. ROBERTSON. Mr. President, I ask unanimous consent to have printed in the RECORD at this point as a part of my remarks two items from the news ticker, dealing with my complaint that an Associated Press story last Monday misrepresented the views I expressed in a Senate speech opposing ratification of the limited nuclear test ban treaty.

There being no objection, the items were ordered to be printed in the Record, as follows:

(see over)

WASHINGTON.—Senator A. WILLIS ROBERT-SON, Democrat, of Virginia, complained in the Senate today that an Associated Fress story last Monday misrepresented the views he expressed in a Senate speech opposing ratification of the limited nuclear test ban treaty.

ROBERTSON said in the Monday speech:
"Knowing what I do about the military issues involved, I would violate the dictates of my conscience if I voted for the pending treaty."

In the Associated Press story, a sentence intended to quote ROBERTSON as saying it would violate his conscience to support the treaty quoted him inadvertently as saying that he would "violate the dictates of my conscience" to support the pact.

A correction was sent later but the original version of the story was published in some newspapers.

ROBERTSON told the Senate today he had seen the erroneous story in Monday's edition of the Los Angeles Herald-Examiner. He read a telegram he sent to that newspaper asking that it publish a correction "making clear that I oppose the treaty, that I am going to vote against it, and that I said so in my floor speech, Monday, September 16."

ROBERTSON told the Senate the Associated Press is "a fine agency and they did not mean to misrepresent me," but added: "I have received telegrams and letters which expressed the feeling that the writers were shocked that a man would violate his conscience by voting for the treaty."

Senator Hubert H. Humphrey, Democrat, of Minnesota, told Robertson, "I know the distinguished Senator from Virginia is not really worried about this misquotation because there is not a living mortal in Virginia or outside Virginia who would ever believe that the Senator from Virginia would vote against his conscience and what his conscience directs him to do."

REPORTS OF COMMITTEES

The following reports of committees were submitted:

By Mr. SPARKMAN, from the Committee on Banking and Currency, without amendment:

H.R. 772. An act to provide for the transfer for urban renewal purposes of land purchased for a low-rent housing project in the city of Detroit, Mich. (Rept. No. 508); and

H.R. 4842. An act to amend the Federal Credit Union Act to extend the time of annual meetings, and for other purposes (Rept. No. 509).

JOINT COMMITTEE ON THE OR-GANIZATION OF CONGRESS—RE-PORT OF A COMMITTEE—INDI-VIDUAL AND SUPPLEMENTAL VIEWS (S. REPT, NO. 504)

Mr. HAYDEN. Mr. President, from the Committee on Rules and Administration, I report favorably, with an amendment, the concurrent resolution (S. Con. Res. 1) to create a foint committee to study the organization and operation of the Congress and recommend improvements therein, and I submit a report thereon, together with the individual views of the Senators from Pennsylvania [Mr. CLARK and Mr. Scorrl, and the supplemental views of the Senator from Pennsylvania [Mr. CLARK]. I ask unanimous consent that the report be printed, including the individual and supplemental views.

The PRESIDING OFFICER (Mr. Harr in the chair). The report will be received, and the concurrent resolution will

be placed on the calendar; and, without objection, the report will be printed, as requested by the Senator from Arizona.

AUTHORIZATION FOR FORMER PRESIDENTS TO ADDRESS THE SENATE—REPORT OF A COMMITTEE (S. REPT. NO. 505)

Mr. HAYDEN. Mr. President, from the Committee on Rules and Administration, I report favorably, with amendments, the resolution (S. Res. 78) admitting former Presidents of the United States to a seat in the Senate as Senators at Large with certain privileges, and I submit a report thereon.

The PRESIDING OFFICER. The report will be received and printed, and the resolution will be placed on the calendar.

GERMANENESS OF DEBATE UNDER CERTAIN CONDITIONS—REPORT OF A COMMITTEE—INDIVIDUAL VIEWS (S. REPT. NO. 507)

Mr. HAYDEN. Mr. President, from the Committee on Rules and Administration, I report favorably, with amendments, the resolution (S. Res. 89) providing for germaneness of debate under certain conditions, and I submit a report thereon, together with the individual views of the Senators from Pennsylvania [Mr. Clark and Mr. Scott]. I ask unanimous consent that the report be printed, together with the individual views.

The PRESIDING OFFICER. The report will be received and the resolution will be placed on the calendar; and, without objection, the report will be printed, as requested by the Senator from Arizona.

MEETINGS OF COMMITTEES WHILE SENATE IS IN SESSION—REPORT OF A COMMITTEE—INDIVIDUAL VIEWS (S. REPT. NO. 506)

Mr. HAYDEN. Mr. President, from the Committee on Rules and Administration, I report favorably, without amendment, the resolution (S. Res. 111) amending rule XXV of the standing rules relative to meetings of committees while the Senate is in session, and I submit a report thereon, together with the individual views of the Senators from Pennsylvania [Mr. Clark and Mr. Scott]. I ask unanimous consent that the report be printed, together with the individual views.

The PRESIDING OFFICER. The report will be received and the resolution will be placed on the calendar; and, without objection, the report will be printed, as requested by the Senator from Arizona.

BILLS INTRODUCED

Bilis were introduced, read the first time, and, by unanimous consent, the second time, and referred as follows:

By Mr. BIBLE (by request):

S. 2155. A bill to provide for regulation of the professional practice of Certified Public Accountants in the District of Columbia, in-

cluding the examination, licensure, registration of Certified Public Accountants, and for other purposes; and

S. 2156. A bill to provide that the Commissioners may accept or permit the acceptance of the performance by volunteers of services for and on behalf of the municipal government of the District of Columbia; to the Committee on the District of Columbia.

By Mr. JOHNSTON (by request):

S. 2157. A bill to amend title 13, United States Code, to provide for the payment of local telephone service in private homes;

S. 2158. A bill to clarify the intent of Congress with respect to certain annuity increase legislation; and

S. 2159. A bill to extend life insurance and health benefits coverage to non-U.S. citizen employees, and health benefits coverage to retired non-U.S. citizen employees, whose permanent duty station is or was in the Canal Zone; to the Committee on Post Office and Civil Service.

NUCLEAR TEST BAN TREATY— RESERVATIONS

Mr. TOWER. Mr. President, I submit two reservations to the nuclear test ban treaty and ask that they be printed. I ask that the two reservations be printed at this point in my remarks.

The PRESIDING OFFICER (Mr. Muskie in the chair). The reservations will be received, printed, and will lie on the table; and, without objection, the reservations will be printed in the Record.

The reservations are as follows:

Before the period at the end of the resolution of ratification insert a comma and the following: "subject to the reservation, which is hereby made a part and condition of the resolution of ratification, that the instrument of ratification of the treaty by the United States shall not be deposited as provided by paragraph 3 of article III thereof until the President shall have determined and certified to the Senate that all assessments for the financing of peace and security operations of the United Nations, heretofore made by the United Nations upon the Union of Soviet Socialist Republics, have been fully paid".

Before the period at the end of the resolution of ratification insert a comma and the following: "subject to the reservation, which is hereby made a part and condition of the resolution of ratification, that the instrument of ratification of the treaty by the United States shall not be deposited as provided by paragraph 3 of article III thereof until such treaty has been revised by the original parties so as to provide for a system of on-site inspections adequate to detect any violation thereof, and advice and consent to the ratification of the treaty as so revised has been given by the Senate".

Mr. TOWER. Mr. President, first, I have offered a reservation providing that the U.S. instrument of ratification of this treaty not be deposited until the President has determined and certified to the Senate that all assessments for the financing of peace and security operations of the United Nations made by the U.N. upon the Soviet Union have been fully paid by the Soviet Union.

I note that in the preamble of this treaty which the Soviet Union signed there is mention of actions to be taken—and here I quote the language of the treaty—"in accordance with the objectives of the United Nations".

I submit then, that if we are to believe that the Soviet Union is at long last to adhere to the objectives of the United Nations, it is not unreasonable to ask that the Soviet Union demonstrate her good faith by paying up the \$52,622,137 arrearage she has amassed.

For 18 years the Soviet Union has done its utmost to sabotage the United Nations—through 101 security council vetoes, by refusing payment of dues for peace operations, by the troika plan for three Secretaries General, and by propaganda abuse. And yet, after the Cuban missile crisis Premier Khrushchev said—and I quote—that he "passionately wished the U.N. to develop as an instrument of strengthening peace and of organizing cooperation between states."

I suggest that this Senate give the Premier his opportunity of achieving his "passionate" desire. If this is to be a peacemaking treaty and a cooperation treaty, we need some assurance that the Soviets really mean it this time.

The Soviet Union owes the United Nations Emergency Force a total of \$15,-638,166. She owes the United Nations Operation in the Congo a total of \$36,-984,971. These are legal obligations of the United Nations according to a ruling of the International Court of Justice. If legal obligations are not paid, the U.N. will eventually flounder in bankruptcy.

Before we accept a Soviet pledge in a treaty which quotes the objectives of the United Nations, we must have some demonstration that the Soviets will support the U.N. and its objectives.

Mr. President, I ask that a table listing Soviet arrearages be printed at this point in my remarks, and that at the conclusion of my remarks there be inserted explanations of the U.N. fiscal crisis from three sources: First, U.S. News & World Report; second, the Senate Republican policy committee; and third, a speech by Richard N. Gardner, Deputy Assistant Secretary of State for International Organization Affairs.

The PRESIDING OFFICER. Without objection, it is so ordered.

The following table lists the assessments and arrears of the Soviet Union with regard to UNEF and ONUC as of July 31, 1963:

United Nations Emergency Force (UNEF)

United Nation's Operation in the Congo (ONUC)

[In U.S. dollars]		
	Assess- ment	Arrears
July 14 to Dec. 31, 1960. Jan. 1 to Oct. 31, 1961. Nov. 1, 1961, to June 30, 1962. July 1 to Dec. 31, 1963.	6, 596, 425 13, 491, 828 11, 976, 000 4, 932, 209	6, 596, 425 13, 491, 828 11, 964, 504 4, 932, 209
Total due (as of July 31,		36, 984, 971

Notes on table:

The assessments for each year through 1962 are taken from "Information on the Operations and Financing of the United Nations," joint committee print of Senate Committee on Foreign Relations and House Committee on Foreign Affairs, 87th Congress, 2d session, and supplement to Joint committee print.

The cost of both the UNEF and ONUC operation was financed from July 1962 through June 1963 by the U.N. bond issue.

The assessments for 1963 are from U.N. Doct. ST/ADM/SER.B/174.

Doct. ST/ADM/SER.B/174.

The arrears as at July 31, 1963, are from U.N. Doct. ST/ADM/SER.B/176.

Note that for certain years Soviet arrears are less than the assessment. This does not indicate that the Soviet Union has paid a portion of its assessment but rather comprises credits from the U.N. tax equalization fund.

(For explanations, see exhibit 1.)
Mr. TOWER. Mr. President, I now turn to my second reservation.

It provides that the U.S. instrument of ratification of this treaty not be deposited until the original parties to the treaty have revised the treaty so as to provide for a system of on-site inspections adequate to detect any violation of the treaty. The reservation provides also that the Senate shall advise and consent to the required revision of the treaty.

I believe that any party which intends in good faith to observe the treaty will accept on-site inspection to prove its good faith. If this treaty is desired in good faith, then every party to it should demonstrate that good faith. Only onsite inspection can assure this treaty's effectiveness. Since the hopes of the world already have been pinned on the treaty, it is but little to ask that it be made positively effective.

Mr. President, I ask unanimous consent to have printed at this point in my remarks a report which outlines past U.S. insistence upon on-site inspection, which insistence rightly developed into a major tenet of U.S. policy for peace.

There being no objection, the report was ordered to be printed in the Record, as follows:

INSPECTION FOR DISARMAMENT

Throughout the postwar years it has been a major tenet of U.S. disarmament policy that this country would enter a disarmament agreement only if it provided for methods to verify that the agreement was being observed by all parties. The history of prewar disarmament experience was interpreted to show the need for inspection to accompany disarmament. President Eisenhower said at Geneva in 1955:

"No sound and reliable agreement can be made unless it is completely covered by an inspection and reporting system adequate to support every portion of the agreement.

"The lessons of history teach us that disarmament agreements without adequate reciprocal inspection increase the dangers of war and do not brighten the prospects of peace." 1

Harold Stassen, then the Special Assistant to the President for Disarmament, stated the following year:

"History shows that any time you make an agreement that you cannot inspect, the agreement itself becomes a source of doubts and rumors, suspicions, charges, countercharges, and actually increases the dangers of war, instead of improving the prospect of peace." ²

A decade before this, however, in 1946 the first postwar U.S. proposal on the international control of atomic energy had already contained inspection as a key element. Bernard Baruch, in presenting the proposal to the United Nations Atomic Energy Commission on June 14, 1946, included inspection and freedom of access for control purposes among the fundamental features of a plan to control nuclear energy. He said:

"Adequate ingress and egress for all qualified representatives of the Authority must be assured." *

Similarly, early U.S. proposals on conventional armaments and armed forces gave heavy weight to inspection provisions. A paper on U.S. views submitted to the United Nations on May 18, 1958, stated:

Nations on May 18, 1958, stated:
"The reporting, inspection, and verification of the elements of the military and paramilitary establishments of the signatory nations is considered the most important safeguard for the regulation and reduction of conventional armaments and armed forces."

In an address to the United Nations General Assembly on October 24, 1950, President Truman included as one of the three basic principles for any successful disarmament

plan:
"Third, the plan must be foolproof.
Paper promises are not enough. Disarmament must be based on safeguards which will insure the compliance of all nations.
The safeguards must be adequate to give immediate warning of any threatened violation. Disarmament must be policed continuously and thoroughly. It must be founded upon free and open interchange of information across national borders." §

Inspection continued to be included in the principles which, the United States maintained were essential in a disarmament program. On April 24, 1952, the United States proposed as essential principles for a disarmament program that international agreements on the subject "must provide an effective system of progressive and continuing disclosures and verification of all armed forces and armaments, including atomic, to achieve the open world in which alone there can be effective disarmament."

can be effective disarmament." a As early as 1952 the importance of "on-the-spot" inspection (which later in the test ban negotiations was known as on-site inspection) was spelled out. A U.S. working paper submitted to the United Nations Disarmament Commission on April 5, 1952, stated:

stated:
"The system of disclosure and verification is an integral part of the system of safe-guards which must be established to ensure observance of the over-all program of regulation, limitation and balanced reduction of armed forces and armaments, so as to provide for the prompt detection of violations while at the same time causing the minimum degree of interference in the in-

¹ Statement by President Eisenhower at the Geneva Conference of Heads of Government, July 21, 1955. Department of State. Documents on Disarmament, 1945-59, vol. 1, pp. 464-487.

³ Hearing before a subcommittee of the Committee on Foreign Relations, Jan. 25, 1956, pp. 20–21.

² Statement of June 14, 1946. Documents on Disarmament, op. cit., p. 15.

⁴ Senate Committee on Foreign Relations, Subcommittee on Disarmament, Disarmament and Security, a collection of documents, 1919–55, p. 282.

 $^{^5}$ Documents on Disarmament, op. cit., p. 258.

Collection of documments, op. cit., p. 86.

ternal life of each country. It will not be adequate to provide merely for the verifica-tion of disclosed information. In addition, provision must be made for determining the adequacy of the disclosed information, through broad general powers of "on-thespot" inspection, through access to statistical data permitting independent confirmation of required reports and through aerial sur-

The importance of having any disarmament agreement accompanied by adequate inspection was reiterated by governmental officials on countless occasions. For example, speaking to the First Committee of the General Assembly on January 14, 1957, U.S. rep-

resentative, Henry Cabot Lodge, stated:
"Deeply as we are convinced of the desirability of a reliable agreement and of the dangers in the absence of agreement, we have nonetheless concluded that a bad agreement is worse for the cause of peace than no agreement. An uninspected agreement, or an inadequately controlled agreement, or a one-sided agreement would be a bad agreement. It would not serve the objective of peace." s

President Kennedy in an address to the General Assembly on September 25, 1961, described the U.S. disarmament proposal as one which "would assure that indispensable condition of disarmament—true inspection and apply it in stages proportionate to the stage of disarmament."

The statement of principles agreed to by the United States and the Soviet Union on September 20, 1961, included as one principle the necessity of inspection including unrestricted access as necessary for the inspectors. It stated:

"All disarmament measures should be implemented from beginning to end under such strict and effective international control as would provide firm assurance that all parties are honoring their obligations.
During and after the implementation of general and complete disarmament, the most thorough control should be exercised, the nature and extent of such control depending on the requirements for verification of the disarmament measures being carried out in each stage. To implement control over and inspection of disarmament, an International Disarmament Organization including all parties to the agreement should be created within the framework of the United Nations.

"This International Disarmament Organization and its inspectors should be assured unrestricted access without veto to all places as necessary for the purpose of effective verification," 10

In an exchange of letters accompanying this statement of principles Presidential Adviser McCloy expressed the U.S. position that adequate inspection must consist of inspection of armaments retained under a disarmament agreement as well as the armaments reduced. He said it was "implicit in the entire joint statement of agreed principles that whenever an agreement stipulates that at a certain point certain levels of forces and armaments may be retained, the certification machinery must have all the rights and powers necessary to insure that those levels are not exceeded." ¹¹

INSPECTION OF A NUCLEAR TEST BAN

The importance of adequate inspection has also been consistently stressed by the United States in the negotiations for a nuclear weapons test ban. After the Geneva

Documents on disarmament, op. cit., p. 350.
Documents on disarmament, op. cit.,

p. 735.
Documents on disarmament, p. 469.

10 Documents on disarmament, 1961, p. 441

11 Documents on disarmament, 1961, p. 442

Conference of experts reached a conclusion in August 1958 that it was technically feasible to establish a control system to detect violations of a test suspension, President Eisenhower proposed negotiations for an agreement to end tests and establish the

suggested control system. He said:
"Progress in the field of disarmament agreements depends upon the ability to establish effective international controls and the willingness of the countries concerned to accept those controls." 12

The plan for an inspection system submitted by the United States on December 16, 1958, provided for onsite inspections to be initiated automatically, whenever detection techniques determined the location of an event which could not be identified as a natural event and could be suspected of being a nuclear explosion. In the case of seismic events, all those above 5 kilotons were to be inspected and 20 percent of those under 5 kilotons. The United States rejected Soviet proposals on the grounds that they did not contain adequate safeguards.

Or. April 13, 1959, President Eisenhower did suggest as an alternative to a comprehensive test ban which would require procedures for onsite inspection a ban which would not include tests underground or

above 50 kilometers in altitude. He said:
"A simplified control system for atmospheric tests up to 50 kilometers could be readily derived from the Geneva experts' report, and would not require the automatic onsite inspection which has created the major stumbling block in the negotiations so far." 12

After long negotiations inspection still remained the principal issue separating the Soviet and Western positions. On April 28, 1961, the date of the 300th meeting of the Geneva Conference on the Discontinuance of Nuclear Weapon Tests, Ambassador Arthur Dean, the chief U.S. negotiator, stated:

"The problems of the second category, where the U.S.S.R. is demanding new Western concessions, go to the very heart of control effectiveness. The Soviet Union wants only a token number of annual onsite inspections, namely, three on each original party's territory. The United States and the United Kingdom, basing themselves on the agreed scientific studies, want a realistic number which will actually tend to deter potential violators, namely, 20 on each original party's territory.
"Again, on criteria, the U.S.S.R. insists on

a formula which would make it questionable whether even one event per year would be certified as eligible for inspection. This has no appeal to the West, which wants scientifically reasonable criteria.

"The Soviet delegation refused to consider any more than 15 control posts on Soviet territory, even though we have already moved to meet its demand, coming down from 21 to 19 and have proved, by the Soviet delegation's own arithmetic that the number cannot be reasonably fewer than 16 in Soviet Asia, 2 in Europe and 1 on a Soviet

A United States note to the Soviet Union on June 17, 1961 complained:

"The Soviet proposals would achievement of the objective of effective control. They would amount to adoption of the principle of self-inspection and would permit any country, if it wished, to evade the agreement with impunity. * * * The United States believes that a treaty prohibiting nuclear weapons tests, like other agreements in the field of disarmament, must contain effective provisions for control." 15

On November 1, 1961, Ambassador Dean in the First Committee of the General Assembis explained why the United States believed an international control system to accompany a test ban was needed. He said:

"Even without a complete international treaty control system, it is possible at present to identify a great number of atmospheric tests of higher yields with fairly good relia-

"But when tests occur on the fringes of outer space and of smaller yields in the atmosphere these tests present much more difficult problems. For accurate detections of these tests, an international treaty system of reporting stations is essential.

"In comparative terms also, tests in the ocean are much more difficult to detect; but the difficult hydro-acoustical problems could

be solved by an effective treaty organization.
"For all these reasons, it is apparent that an international treaty control system is absolutely necesary in order to have any real assurance that the obligations undertaken not to test nuclear weapons are in fact being fulfilled." 16

At a press conference on February 8, 1962, President Kennedy said:

"But at the same time, and with equal energy, we shall go on seeking a path toward a genuine and controlled disarmament.

"What this means for atmospheric testing is methods of inspection and control which could protect us against a repetition of prolonged secret preparations for a sudden series of major tests. If and when effective agreements can be reached, no nation will be more ready than ours to see all testing brought under control and nuclear weapons as well. The fact that we must prudently meet our defense needs in the meantime is only one more reason for working toward disarmament." 17

Secretary of State Rusk on March 23, 1962, told the newly convened 18 Nation Disarmament Conference in Geneva:

"We will not again make our security subject to an unenforceable and uncontrolled moratorium, whether this be in the form of a verbal pledge or a pseudo-treaty such as the U.S.S.R. proposed on November 28, 1961."

"Although American scientists have for the past several years been actively seeking new methods of detection and, even more, of identification of possible nuclear explosions, and although there are some promising avenues of investigation which may be proven in the next few years, the fact is that very little has been discovered up to date to justify any significant modification of the conclusions and recommendations of the Geneva scientists of 1958.

"A test ban, or any disarmament measure, will be acceptable to us only when it is accompanied by adequate measures of verification.

"The United States will consider any proposal which offers effective international verification but the United States cannot settle for anything less." 18

In a letter of December 28, 1962, President Kennedy replied to Fremier Khrushchev's letter indicating that the Soviets would be willing to accept two or three inspections per year:

"I am encouraged that you are prepared to accept the principle of on-site inspections. These seem to me to be essential not just because of the concern of our Congress but because they seem to us to go to the heart of a reliable agreement ending nuclear test-

¹² Statement of Aug. 22, 1958. Department of State. Geneva Conference on the discontinuance of nuclear weapon tests. History and analysis of negotiations, p. 310.

¹⁸ Ibid., p. 355. ¹⁴ Ibld., p. 525.

¹⁵ Ibid., p. 544.

¹⁶ Ibid., p. 565.

¹⁷ New York Times, Feb. 3, 1962, p. 16. 18 Department of State Press Release, March

^{24, 1962,} No. 186.

19 Washington Star, Jan. 21, 1963, p. A6.

EXHIBIT 1

[From the U.S. News & World Report, June 10, 1963]

IS THE U.N. ON THE VERGE OF A CRACKUP? UNITED NATIONS, N.Y.—By all standards normal to business and government, the United Nations is going broke, on the verge of a crackup.

The world organization today is more than \$100 million in the red. By the end of the present year the deficit may be up to \$140 million. If funds are not found, it is said, the peace-keeping organization is likely

to turn into a debating society.

All of this has been brought about mainly by the Soviet Union and its satellites. The Communists, including Castro's Cuba, refuse to pay bills for any U.N. activities not favored by them. The amount they owe the U.N. so far exceeds \$62 million. France, Nationalist China and Belgium also are in arrears on U.N. payments.

UNITED STATES TO THE RESCUE?

The result is that the U.N., once again, must be bailed out-probably by the United

There is concern, but little real alarm here at U.N. headquarters. Top officials believe a way will be found for the U.N. to maintain its police functions in the Gaza strip between Egypt and Israel in the Mideast, and in the Congo in Africa.

In addition, the U.N. is sending a peace-keeping mission of 200 observers to Yemen. Cost of this force, however, is to be borne

largely by Egypt and Saudi Arabia.

Communist attack on the U.N. this time is aimed at these peace-keeping forces. It is largely the bills for these forces that Russia and its East European satellites, plus Cuba, refuse to pay. A senior U.N. official explained the Russian tactics.

"In trying to bend the U.N. to their own needs and desires, the Russians have found that the boycott is dangerous. They tried that at the time of Korea. It was the Rus-sian absence which enabled the U.N. to ap-

sian absence which enabled the prove military action in Korea.

"Just last year the Soviets tried to get control of U.N. machinery by dividing the Secretary-General's powers between three assistants—one a Communist, one a West-smer and one a neutral. But the U.N. wouldn't accept the troika.

"Now the Soviet Union is trying to sabotage the U.N. financial machinery. That won't work either, but it's causing us a lot of trouble" trouble.

TURNING POINT: THE CONGO

The Soviet Union approved the first move to send U.N. troops into the Congo. Khrushchev, at that time, thought the United Nations force would help his man in the Congo, Patrice Lumumba, to stay in power. But the U.N. force, instead, stood in the way of a Communist takeover. It was at this point that the Soviets changed their tactics.

Arguing that the U.N. force in the Congo had become merely a front for the United States and the European colonial powers, Russia and the other Communist members refused to pay their share of the cost of the troops. Nor were they alone in this attitude.

France, also opposing the Congo operation, refused to pay. So did Belgium.
At present, the Communist U.N. members owe \$62.5 million to the U.N. while France owes \$14 million and Belgium \$3 million.

Chiang Kal-shek's government on Formosa is also in default, by \$10 million, but this is largely a matter of money, not politics. The assessment for China's seat in the U.N. involves payment for all of mainland China, which Chiang claims as his own.

What worries the U.N. is that most of the money owed to it is owed for the U.N. peacekeeping units in the Congo and the Mideast. (1) A K K K

Out of the \$502 million needed for all U.N. activities last year, \$102.5 million was for such social welfare programs as the refugee and children's funds. These programs are voluntary and the Communists contribute little, while the United States pays more than its share.

The regular U.N. budget, involving salaries of the permanent staff and the maintenance of U.N. headquarters, ran to \$75 million last year.

LIMIT ON LAGGARDS

The founders of the U.N., knowing the ways of governments, set a rule under which any member nation in arrears for more than 2 years on its assessments to this regular budget will lose its vote in the Assembly. More than 40 U.N. members take advantage of this 2-year rule and are habitually in arrears. But, so far, all of them have paid up before they lost their Assembly votes.

The Communists—and France and Belgium, too—argue that members who disapprove of specific peace-keeping operations, as in the Congo, should not be assessed for their costs as part of regular dues. They refuse to pay. In 1962, U.N. costs in the Con-

go amounted to \$120 million.

As a way around the financial problem of special peace-keeping assessments, Secretary-General Thant in 1961 came up with the idea of a U.N. bond issue, the returns from which would be used to pay the U.N.'s bills.

About \$135 million worth of these bonds, out of \$200 million worth in all have been sold. Half were sold to the United States, the rest abroad. Interest and payment charges were to be added to regular charges to members.

To test the legality of this move, the U.N. went to the International Court of Justice at the Hague to get an opinion on the issue. In July 1962 the justices ruled that the charges for peace-keeping missions should be considered part of the obligations of U.N. members.

Last December, the U.N. General Assembly held, over the opposition of the Communists and the French, that the Congo and Mideastforce assessments were legal and binding on all members and that the 2-year rule applied to these charges just as it does to the rest of the regular U.N. budget.

FROM MOSCOW: ANOTHER "NYET"

Russia, on May 22, served notice on U Thant that it would not pay its share of the U.N. bond charges or of four other items on the regular budget. These included charges for the U.N. commission in Korea, the U.N.'s cemetery for its troops killed in the Korean war, the U.N. mission in the Mideast and the U.N. field service supplying personnel for overseas missions.

In addition, the Russians said they would pay their dues to the U.N. technical assistpay their dues to the U.N. technical assistance fund only in rubles. The Russian dues thus could be used only for the purchase of items from Russia or for the hiring of Russian personnel. Under U.N. rules it is up to the Secretary-General, not the member of the decide of the course bers, to decide what currencies are accept-

SHOWDOWN AHEAD

Said a U.S. official after this Russian move: "The Russians are carrying this battle so far that in the next year or so we are going to be forced to throw them out or make them pay."

The fact is that the Congo operationmain target of the Soviet campaign-is almost at an end. U Thant hopes to get all U.N. military forces out of the Congo before the year's end. That would leave little more than a technical mission.

The U.N. Emergency Force in the Gaza Strip is a different matter. Many experts feel that, if this force were removed, Egypt and Israel would soon be at war again.

Most U.N. officials doubt that the Communist attack on these peace-keeping forces of the U.N. will make much difference for the future. Said one:

"If some real emergency arose I think we would put together a U.N. force and find the money later. Of course, the United States and Britain would pay promptly, but the little fellows could put up token contributions to keep the operation interna-

On the other side you hear opinions like this: "No nation is going to contribute troops unless it has some guarantee that these troops will be paid. If something serious brake out in Portuguese Appola tnese troops will be paid. It sometimes serious broke out in Portuguese Angola or in South-West Africa, run by the Republic of South Africa, you'd get plenty of troops from African countries without any Asians? Scandinavians? I trouble. But doubt it."

RUSSIA'S NEXT MOVE

Deadline for the Communist bloc to pay Deadline for the Communist bloc to pay up at least some of the money they owe the U.N. or lose their Assembly votes comes at the end of this year. What then? Here's the guess of a top U.N. official:

"They'll do just what they've done in the past. They'll fight this thing to the edge of the last ditch, but not into it. They'll pay prough to keep the water and when they do

enough to keep the vote—and when they do pay they'll make statements about how they want to save the U.N. for humanity.

The French already appear embarrassed by their stand with the Communists against payment of their share of the U.N. Congo force. They, like the Belgians, appear to be seeking a means of paying up gracefully before they lose their votes.

Much of the Communist campaign against the U.N. has boomeranged against Moscow, particularly in regard to the small and backward nations of Africa. Many of these countries look on the U.N. as their best protection and do not sympathize with ef-

forts to weaken the world organization.
As for the U.N. itself, the betting here at U.N. headquarters is that the United States, with help from Britain and many smaller nations, will keep the U.N. going through this financial crisis, forcing Russia and its satellites to pay up what they owe, however slowly.

[From the Congressional Record, Apr. 4, 19631

Information on the Current Financial Status of the United Nations

(Note.-Prepared by the staff of the Senate Republican policy committee, BOURKE B. HICKENLOOPER, chairman; David S. Teeple, staff director.)

The United Nations regular budget was \$82 million in 1962. Of this the United States is obligated to pay 32.02 percent; the Soviet Union, 14.97 percent; the United Kingdom, 7.58 percent; France, 5.94 percent; and the rest lesser percentages down to a minimum fixed by the General Assembly, of 0.04 percent.

The regular budget of the United Nations is prepared by the U.N. Secretariat. When the General Assembly of the United Nations meets, it has before it both the budgetary estimates of the Secretary General and the report of the Advisory Committee on Administrative and Budgetary Questions. Decisions on the budget are made by a two-thirds vote of all General Assembly members present and voting.

No serious difficulties have been encountered on payments to the regular budget but difficulties have arisen on the special assessments levied for the U.N.'s Emergency Force in the Middle East (hereinafter designated as UNEF) and the U.N. operation in the Congo (hereinafter designated as UNOC).

The charter of the United Nations lays a specific obligation upon all countries to pay

their assessments or, after 2 years in arrears, face the loss of their votes. But the charter provides, in article 19, "The General Assembly may, nevertheless permit such a member to vote if it is satisfied that the failure to pay is due to conditions beyond the control of the member." As a result member countries great and small are refusing to fulfill their financial responsibilities to the United Nations.

No one has seriously suggested that any of

them be deprived of their votes.

Prior to 1956, the expenses of peace and security operations had been carried within the regular budget. In 1956 UNEF was fi-nanced under a special budget, called a special account, and in 1960 in the case of UNOC, the budget was called an ad hoc

Another account, titled the "Working Capital Fund," is assessed on the same basis of percentage as the regular budget. It currently has a ceiling of \$40 million. It is used partly as a revolving fund to carry the U.N. through the period when the regular budget assessments are due and when regular budget assessments are collected, and partly to finance emergency operations.

While willing to vote these peace and security operations into existence, most countries in the United Nations refused to share the cost of UNEF and UNOC in the usual manner; that is, on the basis of the regular scale of assessments. Because of default on these special levies, the organization will approach debt of \$200 million by the end of 1963. Reasons offered by defaulters for their refusal to share the cost of UNEF and UNOC

in the usual manner were many and varied. First, they contended the charter contemplated peace and security actions should be carried out primarily by the five permanent members of the Security Council who would furnish their troops without cost to other U.N. members. They said the five permanent members of the Security Council should therefore pay considerably more than their ordinary assessment percentage for UNEF and UNOC.

Second, they said the "aggressors" who made U.N. peace and security actions a necessity, plus "parties in interest" should pay all or most of the expenses.

Third, some member countries claimed they could not afford to contribute to the UNEF budget and UNOC budget.

Finally, some countries felt these opera-tions to be unwarranted and in violation of the charter. As a result the United States has felt it necessary to make voluntary con-tributions, over and above our normal assessment contributions, in 1957, 1958, 1959, 1960. 1961, and 1962.

The Soviet Union argued these emergency items did not fall within the assessments procedure provided by the charter and therefore any disapproving member is free to re-

fuse to help pay for them.

The United States contended the charter's provision applied to all expenses of the U.N. The International Court of Justice at The Hague in July 1962 issued an advisory opinion supporting the U.S. position. The Soviet Union says it will ignore the Court's opinion and continue to refuse to pay its share of the special assessments. The Communist bloc countries have followed the Soviet lead and approximately 40 other nations have also refused to contribute to either or both of the peace-enforcing operations.

In the face of this financial crisis the Assembly in December 1961 voted to authorize the Secretary General to sell \$200 million worth of bonds. At President Kennedy's request Congress last year passed a bill authorizing the United States to purchase up to \$100 million worth of the U.N. bonds if the amounts are matched by other members.

Further financial criticism was directed at the United Nations when it was revealed, ·late in 1962, that the U.N. had undertaken to provide a grant of \$1,157,600, over a 5-year period, to assist in the development of an agricultural research program in Cuba. To the extent the United States provides approximately 40 percent of the money contributed to the U.N. Special Fund for Economic Development, it was said that 40 percent of the cost of this assistance to Cuba was defrayed by the United States, contrary to our national interests.

Not all operations of the United Nations are financed through assessments. Several specialized agencies receive voluntary contributions from member countries. These

specialized agencies include:

1. International Atomic Energy Agency.

2. International Labor Organization.

3. Food and Agriculture Organization.

4. United Nations Educational, Scientific and Cultural Organization.
5. World Health Organization.

- 6. International Bank for Reconstruction and Development.
 - 7. International Development Association. 8. International Finance Corporation.
 - 9. International Monetary Fund.
 10. International Civil Aviation Organiza-
- tion.
 - 11. Universal Postal Union.
- 12. International Telecommunications Un-
- 13. World Meteorological Organization.
- 14. Intergovernmental Maritime Consultative Organization.

[From the Congressional Record Appendix, Mar. 21, 1963

SOME CLEAR THOUGHTS ON THE UNITED NATIONS FINANCING

(By Richard Gardner)

In treating this subject today I shall not speak about various long-term solutions to the U.N.'s financial problem, for example, the development of independent sources of revenue. Other participants in this panel may wish to deal with various possibilities of this kind. It is appropriate, it is useful, for discussions of the long-term problem to go forward. But you will recall the famous words of Lord Keynes: "In the long run was are all dead." There will not be a long run in which to seek bold solutions for U.N. financing unless we can deal with the financial crisis which faces us here and now.

Therefore I propose to confine my remarks today to the present financial crisis of the United Nations and to consider in turn three specific questions: What has caused this financial crisis? What progress has been made in coping with it? What now remains to be done?

The causes of the U.N.'s financial difficulties are familiar to most of you. These difficulties do not arise from the ordinary operations which are paid from the U.N.'s "regular budget." The regular budget covers such items as salaries of members of the Secretariat, expenses of operating the headquarters building in New York, and the costs of meetings and conferences. It also includes some of the smaller peacekeeping expenditures such as the truce supervision activities in Palestine, Kashmir, and Korea.

The regular budget is financed principally by an agreed scale of assessments on memby an egreet scale of assessments on members which is broadly based on capacity to pay. The United States contributes 32.02 percent of this amount. The payment record of the members is generally good and the arrears are not of disruptive dimensions. sions.

As you know, however, the expenses for the Middle East and Congo operations were financed from the beginning from separate accounts. Taken together, these operations since 1960 have imposed on the members of the U.N. expenses of about \$140 million a year, about double the size of the regular budget.

Because these costs were so large, op-position quickly developed on the part of many U.N. members to sharing the cost in the usual manner—that is, on the basis of the percentage assessments used in the regular budget. In order to gain approval by the General Assembly for resolution to finance these operations it was necessary, beginning with the Middle East operation in 1956, to reduce the assessments for members less able to pay; in other words to assess them for peacekeeping operations at only a fraction of the assessment they have to pay for the regular budget.

Over the last few years almost 90 percent of the U.N. membership has secured relief from the regular assessment rate with respect to the Congo and Middle East budgets. the 110 U.N. members, 42 countries have a regular assessment rate of 0.04 percent. For Congo and UNEF their assessment was reduced by 80 percent of their normal scale, to 0.008 percent. As an example of how this has worked out, we can look at the way the costs of the Congo and Middle East opera-tions were shared in the first half of 1962. Instead of being asked to pay the \$35,900 they would have paid at the regular budget scale these countries were asked to pay only \$7,180.

Reductions by 80 percent were also given 43 additional countries whose regular budget assessment rate was more than 0.04 percent but who were recipients of U.N. technical assistance. Moreover, four additional countries received 50-percent reductions. Thus no less than 89 member governments were excused from 50 to 80 percent of their assessments to these vital peace and security op-

UNITED STATES AND VOLUNTARY CONTRIBUTIONS

To finance these operations notwithstanding the reduced assessments on these 89 countries the Secretary General appealed for voluntary contributions. Starting with the Middle East operation in 1957, the United States has made large voluntary contributions each year in addition to its regular scale assessment to make it possible for these operations to go forward. In the last several years no other country has made vol-untary contributions of this kind, with the sole exception of the United Kingdom which has made very small voluntary payments for the Middle East operation.

With these voluntary payments added to our assessed share, the United States in recent years has been assuming an average of about 48 percent of the burden of the Congo and Middle East operations.

This is the method of financing U.N. peacekeeping operations which has been in effect since 1957. It does not take very long to conclude that this system had two unacceptable aspects:

First, it placed a disproportionate share, nearly half, of the cost of these operations on the United States.

Second, and even more important, a large number of U.N. members were not even meeting their obligations under this arrange-

The members of the Communist bloc refused to pay because they oppose peacekeeping operations in general.
France, South Africa, the Arab countries,

and others refused to pay for at least one of the operations because they did not agree with this peacekeeping operation in partic-

Others, including most of the less developed countries, failed to pay even their reduced assessment and argued that they were too poor to do so.

To make matters worse, legal arguments were advanced by the Communist bloc and many other countries to the effect that the General Assembly could not levy valid assessments for peacekeeping operations out-

side the regular budget and accordingly that

side the regular budget and accordingly that they were under no obligation to pay.

As a result of this nonpayment of assessments, the United States was in the unacceptable position of paying in even more than the 48 percent of the Middle East and Congo operations it had undertaken to pay, although of course the amounts are still due and payable by the defaulters. At the same time the gap between the assessments due for the costs of the two operations and the money actually received from the member-ship continued to grow until it reached about \$100 million by the middle of 1962.

RESCUE OPERATION, SPECIAL FUNDS

To reduce the disproportionate U.S. share of U.N. peacekeeping operations, to avoid the imminent collapse of these operations as a result of the growing deficit, and to safeguard the future potential of the U.N. as a vital factor in maintaining peace and security, the U.S. Government joined with other free world countries and with the Secretary General to search for ways and means of solving the U.N.'s financial crists. This search produced a rescue operation beginning in the 16th General Assembly which had four major elements:

First, one more General Assembly resolution for the emergency financing of the Mid-dle East and Congo operations for the first 6 months of 1962 by the usual combination of assessments and voluntary contributions.

Second, a bond issue to finance these operations after June 30, 1962, while a more satisfactory solution to the financial problem was worked out.

Third, a request to the International Court of Justice for an advisory opinion which would establish a firm legal basis for the collection of arrearages by determining whether peacekeeping assessments consti-tuted binding legal obligations in the same way as assessments for the regular budget. Fourth, an intensified study of better ways

of financing U.N. peacekeeping operations in the future.

Since this rescue operation was approved by the 16th General Assembly in December 1961, there has been progress on a number of fronts.

Purchase of U.N. bonds got underway in 1962. The U.S. Congress authorized a loan to the United Nations to purchase bonds up to the amount purchased by all other countries. Some foreign governments, such as the Scandinavian countries, responded handsomely to the bond issue by purchasing amounts far in excess of their regular budget percentage. And the 17th General Assembly in its budget authorization for 1963 included an amount of \$4,650,000 for repayment of interest and principal of the bonds in the regular U.N. budget, in which the United States share is 32.02 percent.

ICJ ADVISORY OPINION

The International Court of Justice handed down last July a favorable advisory opinion which ruled that the costs incurred by the U.N. in the Congo and Middle East operations were "expenses of the organization" and that the assessments levied to pay for them constituted binding legal obligations. The General Assembly accepted this opinion on December 19, 1962, by a vote of 76 in favor, 17 against, and 8 abstentions.

The events in the General Assembly leading up to the acceptance of this opinion provided considerable grounds for satisfaction. A number of States, including the tion. A number of States, including the Soviet bloc and France, urged that the General Assembly should only "take note" of the Court's opinion. The effect of this language, as brought out in the debate, would have left it to the discretion of each state whether it considered itself bound to pay for the peacekeeping assessments. An amendment to change the wording of the resolution from "accepts" to "takes note" was proposed in the Fifth Committee and de-

feated by 28 votes in favor, 61 against, and

14 abstentions.

The debate on the advisory opinion made it abundantly clear that the term "accepts' used in the General Assembly resolution meant that the U.N. was adopting the Court's view as its operating rule. This means that the assessments in question have been determined to be binding obligations on member states and are therefore due and payable. If not paid, a member becomes subject to loss of vote in the General Assembly under article 19 of the Charter, if its total arrears exceed its last 2 years' assessments on accounts. This will apply to the Soviet Union as of January 1, 1964, if it pays nothing for the Congo and UNEF between now and that time.

With the question about the legality of past assessments out of the way, the Secretary General was at last in a position to mount an effective campaign to collect them. A number of governments which had declined to pay their assessments for the Mid-dle East and Congo operations announced in the wake of the General Assembly resolution that they would now begin to pay.

The 17th General Assembly also decided to increase the working capital fund from \$25 million to \$40 million. This action establishes a more rational relationship between the present level of the regular budget and the need for reserves. It adds signifi-cantly to the financial capacity and resources of the organization.

As a further measure to put the U.N.'s financial house in order, the Secretary General appointed as his chief financial adviser Eugene Black, former president of the World Bank. Mr. Black will assist the Secretary General in dealing with the problem of ar-rearages as well as advise him generally on other aspects of the U.N.'s financial problem.

Finally, the General Assembly buckled down to work on the future financing of peacekeeping operations. It set up a working group of 21 nations, of which the United States is a member, to study and make recommendations on a cost-sharing formula for the future costs of these operations. The group is now in session and is under instructions to complete its work by March 31. A special session of the General Assembly has been called to convene on May 14 to act on its recommendations.

All this is on the credit side of the ledger, but the last year has registered serious debits as well.

Although the General Assembly authorized a \$200 million bond issue, only about \$74 million has been subscribed by 58 countries other than the United States, despite our readiness to buy up to \$100 million of bonds on a matching basis. Assuming that all the bonds subscribed are actually purchased, the U.S. matching purchase would bring the total up to only about \$148 million of the \$200 million worth of bonds that was anticipated. Prudent financing dictates that the rest of these bonds be sold, and sold quickly.

Moreover, although many members have indicated their readiness to abide by the law declared by the International Court and confirmed by the General Assembly, they have not actually paid. The Soviet bloc, which apparently does not believe in abiding by the law even after it has been declared, has still not paid 1 cent toward the Middle East and Congo operations. France is still refusing to pay its past assessments for the Congo; indeed, it has announced that it will not even pay that portion of its regular budget assessment which is necessary to pay back the principal and interest on the U.N. bonds.

As a result of these and other facts, arrears owed to the U.N. as of January 1, 1963, amounted to \$121 million. Twenty-five U.N. members have still paid nothing on their UNEF assessments; 48 members have still paid nothing on their Congo assessments.

It is difficult to escape the conclusion that the United Nations is not being supported and is not supporting itself when arrears have accumulated so far and continue to increase and when major and minor powers continue to refuse to fulfill their legal obligations.

If this situation long continues, public opinion in the United States will be forced to interpret these facts as a demial in practice by many members of the U.N. of something which all the members have accepted in principle, that peacekeeping operations are conducted in the interest of the well-being of the entire world and should be the responsibility of all the members of the organization. This is what we mean by the phrase "collective financial responsibility," it is, or should be, the cornerstone of the organization.

WHAT ARE THE NEXT STEPS?

It is against this mixed record of success and failure that we must now consider what next steps to take in dealing with the U.N.'s financial crisis.

In discussing these next steps it will be useful to keep our eye on the central question. The problem currently before the working group of 21 in New York is very specific; namely, How to finance the Congo and Middle East operations beyond June 30, which is about when the money from the bond issue runs out.

When the General Assembly meets in special session in May it will have to adopt resoltuions which will provide for the future financing of these two operations, at least from July 1 to December 31, or it will have to recommend their abrupt discontinuance.

This is the very practical problem immediately before us. It should receive prompt attention and not be lost sight of in a search for possible general principles to govern the financing of unknown operations which are not yet even a gleam in any member's eye.

To put it more broadly, the United States believes that for some time to come it would be wise for the U.N. to deal with the method of financing of each peacekeeping operation if and when that operation occurs, learning from each experience what might be desirable for the future and adjusting each solution to the particular facts of each case. We believe that this approach is the only sensible and practical one to follow at this time, given the present financial plight of the United Nations, the present deep political United Nations, the present deep political difficulties between its members, the unpredictable character of any future peacekeeping operations, and the virtual impossibility of now agreeing on any one single formula or any one single set of principles or criteria to govern unknown operations yet to be begun.

Assuming, then, that the immediate question is the financing of the Middle East and Congo operations for the 6 months of 1963, and that the answer to this question constitutes no precedent for the future—what is the answer to be?

In posing this question we are assuming that these operations must continue. Obviously the United States favors the most rapid possible reduction of the Congo force consistent with the increasing capability of the Congolese Government to maintain minimal levels of security and insure its national integrity.

At the same time it would be the height of "pennywise pound foolishness" to reduce either operation so rapidly as to jeopardize all the substantial gains that they have brought to Africa and the Middle East with much sacrifice and effort over the past few years.

Assuming there will be a cost, though somewhat reduced, for the Congo and UNEF operations in the last 6 months of 1963, a strong case can be made for financing this cost at the regular budget scale for the following reasons:

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1. The regular budget assessment scale is roadly based on capacity to pay. Very broadly based on capacity to pay. Very substantial adjustments in the regular assubstantial adjustments in the regular assessments scale are made for low per capita
income countries, beyond what would be
called for by comparative national income
figures. It is true that the regular budget
scale involves a celling for the U.S. contribution. But this celling derives from a
fundamental principle long accepted by the
General Assembly, that, in an organization
of sovereign states where each nation has
one vote, it is not in the interest of the
organization to depend too much financially organization to depend too much financially

on any one state.

2. The United States has been virtually alone in making voluntary financial contributions to the Congo and Middle East opertions. It has thus been assuming an average of 48 percent of the burden. The financial load simply must be more broadly based, and the carefully worked out cost-sharing for-mula to accomplish this is the regular budget scale.

3. Since the establishment of the United Nations, the United States has been by far its largest financial supporter. Its assessed contributions have always been more than twice those of the second largest contributor. The proportion of its voluntary contributions has been even higher. It contributes 70 per-cent for the Relief and Works Agency for Falestine refugees, over 50 percent for the Congo economic assistance program, 42 per-cent for the U.N. Children's Fund, and 40 percent for the Special Fund and the Ex-panded Program of Technical Assistance.

4 Quite apart from the United Nations, the United States is bearing a heavy load of foreign ald and defense burdens. Our total contributions for economic development abroad amount to over \$5 billion a year— more than double the aid total of the rest of the free world and at least five times the aid made available by the Communist bloc. 5. The peacekeeping operations of the United Nations are not just a matter of interest to the great powers. The small countries have perhaps the greatest stake of all in their success and effectiveness. It is true that these countries are not well off, but the amounts involved are not substantial. For amounts involved are not substantial. For the last 6 months of 1963 the regular assess-ment share of the 42 countries in the 0.04-

ment share of the 42 countries in the 0.04-percent category would amount to the cost of two or three large limousines or a few big diplomatic receptions. Is this too high a price to pay for keeping the peace?

It is these reasons, coupled with the still inadequate record on the payment of past assessments, which have led to the present ILS position in the working group of 21 assessments, which have led to the present U.S. position in the working group of 21. Lest there be any question, the United States stands ready to pay its full 32.02-percent share of the Congo and Middle East operations. But until collective financial responsibility becomes a fiscal practice as well as a legal theory, it would hardly be fair for the United States to pay more than this percentage, either through assessed or voluntary centage, either through assessed or voluntary contributions.

We are hopeful that a determination to get the U.N.'s financial house in order is beginning to manifest itself among the members. There are signs of recognition that only through a meaningful system of collective financial responsibility can the organization continue to carry out its current tasks and future reproscribility.

tasks and future responsibilities.

The hard fact of political life is this: Attitudes in the United States toward any possible future contribution above our regular scale assessment for peacekeeping operations will inevitably depend on whether the vast majority of the membership takes the necessary measures in the next several months to give the United Nations the financial support which is absolutely essential to its survival.

6. "The United Nations," said U Thant in

his recent Johns Hopkins lecture, "does not represent a vague ideal of universal peace

and brotherhood which has its appeal only to starryeyed idealists and moralists. Far from it. It is hardheaded, enlightened selfinterest, the stake that all humanity has in peace and progress and, most important of all, survival that dictates the need for the United Nations as a practical, institu-tional embodiment of the needs of nations on a shrinking planet, as a potent and dynamic instrument at the service of all nations, east and west, north as well as south."
If this statement of the Secretary Gen-

eral is correct, and we most definitely believe that it is, then it is time to face the financial consequences.

The present financial crisis of the United Nations involves the survival of the organization itself, for no institution can long survive if it cannot pay its debts and if its members are not willing to supply it with the funds necessary to continue its operations.

The menu of the U.N. is substantial and

important. The check is no less so. Countries cannot expect to take the benefits of membership in the U.N. without the burdens,

AMENDMENT OF SECTION 22 OF INTERSTATE COMMERCE ACT ADDITIONAL COSPONSORS BILL.

Mr. HART. Mr. President, I ask unanimous consent that at the next printing of the bill (S. 2075) to amend section 22 of the Interstate Commerce Act so as to assure that rates, fares, and charges established under that section for the U.S. Government are free from undue prejudice and preference, introduced by me on August 23, 1963, the names of Mr. Hartke, Mr. Humphrey, Mr. McCarthy, Mr. McNamara, and Mr. PROXMIRE may be added as cosponsors.

The PRESIDING OFFICER. Without objection, it is so ordered.

CONDOLENCES TO FAMILIES NEGRO CHILDREN KILLED BIRMINGHAM ADDITIONAL CO-SPONSOR OF RESOLUTION

Mr. HART. Mr. President, I ask unanimous consent that at the next printing of Senate Resolution 200, extending condolences of the Senate to the families of Negro children killed in Birmingham and favoring the designation of Sunday, September 22 as a day of national observance to their memory, the name of the Senator from Maryland [Mr. Brewster] be added as a cosponsor.

The PRESIDING OFFICER. Without objection, it is so ordered.

CONGRESSIONAL REVIEW OF FED-ERAL. GRANTS-IN-AID — ADDI-TIONAL COSPONSORS OF BILL

Mr. MUSKIE. Mr. President, I am pleased to announce that both the junior and senior Senators from Wisconsin have joined the distinguished list of cosponsors of the bill (S. 2114) to provide for periodic congressional review of future Federal grants-in-aid to States and to local units of government. This brings the total number of sponsors to 30, which augurs well for the future of this legislation. I ask unanimous consent that at its next printing the names of Mr. PROX-MIRE and Mr. NELSON be added.

The PRESIDING OFFICER (Mr. HART in the chair). Without objection, it is so ordered.

AMENDMENT OF FOREIGN ASSIST-ANCE ACT OF 1961—ADDITIONAL COSPONSOR OF AMENDMENTS

Under authority of the order of the Senate of September 11, 1963, the name of Mr. Dominick was added as an additional cosponsor of the amendments submitted on September 11, 1963, by Mr. Keating (for himself and other Senators), intended to be proposed by them, jointly, to the bill (H.R. 7885) to amend further the Foreign Assistance Act of 1961, as amended, and for other purposes.

NOTICE OF HEARINGS ON NOMI-NATION OF JOHN A. GRONOUSKI TO BE POSTMASTER GENERAL

Mr. JOHNSTON. Mr. President, as chairman of the Committee on Post Office and Civil Service, I wish to announce that hearings have been scheduled for Monday, September 23, 1963, at 10:30 a.m. in connection with the nomination of Mr. John A. Gronouski to be Postmaster General.

Hearings will be held in room 6202 of the New Senate Office Building. Those wishing to testify may arrange to do so by calling CA 4-3121 extension 5451.

NOTICE OF HEARINGS ON FREE-DOM OF INFORMATION BILL

Mr. LONG of Missouri. Mr. President, I would like to announce hearings before the Subcommittee on Administrative Practice and Procedure on S. 1666 on October 28-31 inclusive, in room 2228, New Senate Office Building, beginning at 10 a.m. each day.

S. 1666 is designed to revise section 3 of the Administrative Procedure Act. It is the so-called Freedom of information bill, introduced by me with 17 distinguished cosponsors on June 4 of this

Persons wishing to testify should notify the subcommittee's chief counsel, Mr. Bernard Fensterwald, Jr., room 3216 New Senate Office Building, telephone CA 4-3121, extension 5617.

NOTICE OF HEARING ON NOMINA-TION OF GEORGE CLIFTON ED-WARDS, JR., OF MICHIGAN, TO BE U.S. CIRCUIT JUDGE, SIXTH CIR-CUIT

Mr. EASTLAND. Mr. President, on behalf of the Committee on the Judiciary, I desire to give notice that a public hearing has been scheduled for Tuesday, October 1, 1963, at 10:30 a.m., in room 2228, New Senate Office Building, on the nomination of George Clifton Edwards. Jr., of Michigan, to be U.S. Circuit Judge, Sixth Circuit, vice Thomas F. McAllister, retired.

At the indicated time and place persons interested in the hearing may make such representations as may be pertinent.

